

Med

### CANADA

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### INDEX TO VOL. IV.

LACTE:	LAGE
Aneurism Treated by Acupressure 68	CANNIFF, W., M.D., On the Treatment
'- Treatment of 116	of the After Birth
A New Anæsthestic	Can Typhoid Fever be arrested 371
A note on Chronic Urticaria 555	Carbolic Acid as a Gargle 185
A Raid on the Uterus 240	Case of Acute Glossitis 215
BAIN, D. S. E., F.R.C.S., Edinburgh, on	Cases of Acute Rheumatism, By R. W.
the use of Carbolic Acid in Surgery. 888	Jackson, F.R.C.S 49
BAUER, LOUIS, M.D., Surgical Cases 1	Case of Bromine Poisoning 77
BAUER, LOUIS, M.D., Lectures on Joint	Case of Compound Fracture of the Skull
Diseases 145	with loss of Brain Substance 391
BAUER, LOUIS, M.D., Comments on the	Case of Double Ovariotomy, By Professor
Treatment of Diseased Joints 199	H. R. Storer of Boston 887
BAUER, LOUIS, M.D., Lectures on Joint	Case of Fronto-temporal Neuralgia 408
Diseases	Case of Hydatids of Uterus Simulating
BAUER, LOUIS, M.D., Lectures on the	Pregnancy 42
Pathology and Treatment of Joint	Case of Irritability of the Bladder 500
Diseases 289	Case of Lithotomy by a new Operation 851
BELL, JOHN, A.M., M.D., Post Mortem	Case of Poisoning by Stramonium 485
Appearances in a Case of Poisoning	Case of Poisoning by Sulphuric Acid 58
by Sulphuric Acid 58	Case of Sloughing of Urethra and Scro.
BELL, JOHN, A.M., M.D., Report of a Case	tum 457
of Staphylorrhaphy 485	Case of Uterine Tumour 488
Balladonna for Incontinence of Urine 87	Chemists Association, Montreal 576
BLACKWELL, E. S., Esq., Chemical Se-	Chlorate of Potassa in Catarrh of the
lections10, 106	Bladder 21
Brathwaite, F. H., M.D., case of Obstruc-	Chloroform in Midwifery 136
tion of the Bowels 542	Chloroform given Internally 139
Bromide of Ammonium 237	Chorea treated with Sulphate of Man-
Bromide of Potassium, Uses of 126	ganese 330
Burns or Scalds 45	Civiale's collection of Calculi 471
CAMPBELL, G. W., A.M., M.D., Case of	Clinical Lectures on Stone 57
Excision of the Elbow Joint 438	Clinical Lecture on Heat Eruptions 227
Canadian Medical Society 48	Clinical Remarks on the Treatment of Va-
Canadian Medical Association Conven-	ricose Veins 553
tion at Quebec 168	Cod Liver Oil, Action of 88
CANNIFF, W , M.D., On Tuberculization	Considerations upon Otorrheva 348
in Various Countries 97	Connecticut Medical Society 96
CANNIFF, W., M.D., Remarks upon Car-	Convocation of Victoria University 666
bolic Acid	CORRESPONDENCE 201

PAGE.	PAGE.
	Convocation of McGill University 525
Curare in Epilepsy	Chemists' Association of Montreal 528
Diagnosis between Hernia and Enlarged	Dr. Diehl of Toronto
Inguinal Glands	Canadian Graduates Abroad 528
Diagnosis of Ovarian Tumours 210	University of McGill, new appointment 528
Minhthoria 408	Medical Practitioners (Colonial) Bill 568
Sinhtheria and Croup, Differential Diag-	The American Medical Association and
mogic 80	the Canadian Medical Association 565
Discussed Joints Treatment by Escharotics 195	Elephantiasis, ligature of main artery in 116
Dislocation of the Shoulder of Ninety-two	Epistaxis 274
days duration, reduction by Manipu-	Epistaxis and the means of arresting it. 353
lution 502	Ergot in Paralysis of the Bladder 501
Doctors as Teeth Pullers 144	Excision of the Clitoris 207
DRAKE, JOSEPH M., M,D., Case of Poi-	Excretion of Urea 516
soning by Sulphuric Acid 58	External Manual Pressure during the se-
DR. CANNIFF'S Work on Surgery 189	cond stage of labour 878
Dropsy of the Peritoneum 513	Extirpation of an Hypertrophied Spleen
EDITORIAL.	-Recovery
Hospital for Sick Children 46	Extirpation of the Scapula
Ether Spray in Uterine Hæmorrhage. 47	False Teeth swallowed and passed by the
Canadian Medical Society 98	Bowels
Life Assurance Companies 95	FENWICK, G. E., M.D., Stricture of
The Medical Convention at Quebec 140	Urethra, case of
Medical Convention of Canada 190	
District of Bedford Medical Society 191	FENWICK, G. E., M.D., Case of Acute
To Our Subscribers	Rheumatism with Brain complication 589
Ball to the Delegates at Quebec 192	Food for Babies 424
Ball to the Delegates at Quebec 102	Foreign bodies in the Ear
Uniform System of Granting Licenses	Fracture of Humerus at Surgical Neck. 112
to Practice 284	Funis, Prolapsus of
Loose Statements	General Rules for Diagnosis of Diseases
An Insane Hospital 285	of the Heart 184
Medical Faculty of McGill University,	GIBB, SIR DUNCAN, BART, M.D., L.L.D.,
Changes in	On the Necessity of Supporting a Me-
Iodinized Cod Liver Oil 287	dical Journal in Canada 317
A Correction 287	Gonorrhœa, A new remedy in 16
Mortuary Statistics of the City of Mon-	Gonorrheal Rheumatism 282
treal 333	GRANT, JAMES A., M.D., F.R.C.S.E.,
Gymnastic Exercises 334	Case of Talipes Equinus Acquisitus 486
The Toronto Hospital 336	Gunshot wound of Brain 111
The Montreal Dispensary 386	Heat Eruptions, Lecture on 227
To Contributors 386	Hematemesis in a Child 134
City By-Law respecting Burials 380	Hemeplegia following Puerperal Convul-
The Relative Rank of Volunteer Sur-	sions 423
geons 381	HINGSTON, W. H., M.D., L.R.C.S.E., Re-
Acupressure 383	ply to Loose Statements 265
, The Question settled at last 383	Homeopathic Foolery 144
The Pacific Medical and Surgical Jour-	Hospital Notes and Gleanings 393
nal 384	HOWARD, R. P., M.D., L.R.C.S.E., Sta-
The late Archibald Hall, M.D., L.	phylorrhaphy in a Case of Congenital
R.C.S.E 429	Fissure of the Hard and Soft Palate. 435
SIR J. Y. SIMPSON, on the late Sir	Hypertrophy of Neck of the Uterus 811
David Brewster 472	Hypochondriasis, Treatment of 504
The Canada Journal of Dental Science 478	Hysteria in the Male 406
CAMPBELL'S Cod Liver Oil 478	Idiopathic Glossitis
Elixir of Calisaya, Iron and Bismuth 479	Induction of Premature Labour by the
Elixir of Phosphates of Iron and Lime 479	Douche
Corresponding Editors 522	Infantile Convulsions 360
The Notman Abortion Case 522	Inflammatory Diseases of the Cocum 389

INDEX. vii

rage.	PAUL
Ingrowing Toe Nail 216	New Treatment of Lead Poisoning 28
Inoculation of Tubercle 326	Nightmare in Children 22
Iodide of Lead in Cutaneous Diseases 511	Nipples, sore or excoriated 3
Iodide of Potassium in Cachexico., 365	Nitrate of Potash in Ague 13
Iodine in Scrofulous Diseases 271	Nitrate of Silver stains 14
Iodine in Uterine Leucorrhea 28	Nitrate of Amyl in Angina Pectoris 46
JACKES, A. G., M.D., Report of Surgical	Observations on Substances liable to be
Cases 1	mistaken for Intestinal worms 8
JACKSON, R. W., F.R.C.S.I., Cases of	Obstruction of the Bowels, Treatment of 50
Acute Rheumatism 49	Obstructive mitral valve Disease, Diagno-
JACKSON, R. W., F.R.C.S.I., Cases of	818 of
Delirium Tremens 440	On Infantile Convulsions 41
Knock-knee	On Neuralgia 51
Lactate of Zinc in Epilepsy 517	On Rigid Perineum, Dr. Beatty, 2
Lancing the Gums in Children 501	Operation for Double Hare,Lip 44
Laryngoscopy 284	Operation for Irreducible Dislocation
Laxative Pills	of the Shoulder 7
Lead Poisoning, Treatment of 280	Permanganate of Potash in Acute Rheu-
Lectures on Joint Diseases	matism
Lecture on Knock-knee 218	Pertussis, Treatment of 8
Lecture on Pycemia as a result of Endo-	PHILIP, DAVID L., M.D., C.M., Case of
carditis	Retroversion of the Uterus 19
Lemire, E., M.D., De la Syphilis Vaccinale 487	Phosphate of Soda in the Intestinal
Leucorrhœa, Iodine in	trouble of Children., 47
Ligation of Common Carotid 117	Phosphorous Pills
Ligature of Veins	_ 0100111111111111111111111111111111111
London Correspondence	Pregnancy of more than five years dura-
Management of Weak Children 35	Proceedings of Alumni Association of
Marsden, W., M.D., On the contagion	Victoria University 56
and Portability of Asiatic Cholera 529	Production of the Sexes at will
MoGillivray, D., M.D., Case of Poison-	Professor Depaul
soning by Datura Stramonium 485	Pulmonary Consumption, Treatment of. 12
McCallum, G. A., M.D., Case of Phleg.	Prolapsus of the Urethra in little Girls 37
monoid Erysipelas surrounding the	Promotion of Epileptic Attacks 563
Cæcum	Puncture of the Bladder above the Pubis 85
Medical Association of the County of	Purpura Hæmorrhagica before and after
Hastings 574	Labour
MCMASTER, ALEX., M.D., On Diseases	Purpura Hæmorrhagica in Children 20
the Cæcum	Quinine in Croup 186
MCMASTER, A., M.D., On Disorders of	Quinsy, Treatment of 181
of the Functions of Stomach 489	REDDY, JOHN, M.D., Case of Fracture
MEDICAL NEWS.	of the Cranium 166
Death of Professor Velpeau 148	Remarks on Carbolic Acid 807
Compound Iodinized Cod Liver Oil 287	REMARKS ON DR. HINGSTON'S REPLY
Promotion of Dr. Corbett 288	to Loose Statements 267
Asiatic Cholera	Remarks on the Follicular Chancroid 321
Book Announcements 288	Removal of a Coin impacted in the throat
Cycles in Disease 288	of a child 17
Venus and Mars 884	REPORT OF THE MONTREAL GENERAL
Sir William Ferguson	HOSPITAL 238
Meeting of American Medical Associa-	Report of the Veneral Commission 78
Modical Nows	Reproduction of Bone 217
Medical News	Resuscitation from Hyperanæsthesia 376
Morbus Coxarius, Exsection	Rheumatism Blenorrhagie 282
Morning Sickness of Pregnancy	REVIEWS AND NOTICES OF BOOKS.
Narcine 45	Obstetrics, the Science and the Art, By
45	Charles Meigs, M.D 13

PAGE.	FAGE.
Practical Dissections, By Richard M.	Sponge Tents Carbolized 521
Hodges, M.D., Demonstrater of	Storer, Dr., Private course of Lectures 48
Anatomy, Harvard University 14	STORER, HORATIO R., M.D., The present
The Renewal of Life, By T. K. Cham-	Problems in Abdominal Section 337
bers, M.D 56	Strychnine in Epilepsy 123
Lectures on Public Health 56	Sulphite of Soda in Erysipelas 464
A Biennial Retrospect of Medicine and	Sulphite of Soda, its Nature 501
Surgery 204	Sulphites in Zymotic Diseases 371
Chemistry, By W. T. Brande, D.C. L. &c. 206	Supra Orbital Neuralgia 78
Practice of Medicine and Surgery ap-	Surgical Cases in Buffalo Hospital 72
plied to diseases and accidents of	Syrup of Chloroform 428
Women, Byford 269	Syrup of Santonine 45
The Canadian Horse and his Diseases,	Talipes Equinus Acquisitus 486
By D. McEachern, M.R.C.V.S 270	Tœnia Mediocanellata 82
Lectures on Materia Medica, J. Carson 271	Tetanus never of Centric Origin 221
A Treatise on Human Physiology, By	Tetanus Relieved by Opium, Bromide of
John C. Dalton, M.D 319	Potassium and the Calabar Bean 62
Injuries of the Eye, Orbit and Eyelids,	Treatment of advanced Stage of Croup 323
By G. Lawson, F.R.C.S., Eng 320	Treatment of the After Birth 385
Annual Abstract of Therapeutics, Ma-	Treatment of Biliary Calculus 76
teria Medica and Toxicology, By	Treatment of Chorea by Sulphate of zinc. 459
A. Bouchardat 390	Treatment of Croup 467
The Principles and Practice of Obste-	Treatment of Enlarged Glands : 355
tries, By G. S. Bedford. A.M., M.D. 443	Treatment of Joint Diseases 289
Pennsylvania Hospital Reports 445	Treatment of Menorrhagia 225
A Practical Treatise on Diseases of Wo-	Treatment of Ozena 357
men, By T. Gaillard Thomas, M.D. 492	The air treatment of Wounds 217
Hufeland's Art of Prolonging Life 493	The American Medical Association 576
Lectures on Orthopædic Surgery 494	The Antiseptic principle in Surgery 495
Epidemic Meningitis or Cerebro-Spinal	The Obstetric Hand 556
Meningitis. By Alfred Stillé. M.D. 548	The Value of Tartar Emetic in Brain
Obstetric Clinic, a Practical contribu-	Affections
tion to the Study of Obstetrics, By	The Use of Calabar Bean in Tetanus 69
G. T. Elliot, jun., A.M., M.D 545	The Uses of Carbolic Acid in Surgery 388
Richardson's Styptic Colloid 44	To Our Subscribers 576
Rigid Perineum: 419	Treatment of Venereal Diseases 546
Rosebrugh, A.M, M.D., Lectures on	The Contagion and Portability of Asiatic
Diseases of the Eye 101	Cholera 529
Ross, Grorge, A.M., M.D., Report of	Use and Abuse of Poultices 18
Case of Stricture of the Urethra 259	Valedictory Address to the Graduation
Ross, George, A.M., M.D., Report of	Class, Session 1867 and 1868., 481
Case of Excision of Elbow Joint 483	Whooping Cough, Treatment of 119
Ross, George, A.M., M.D., Report of	WORTHINGTON, E. D., M.D, Correspon-
case of Acute Rheumatism with	dence
Brain complication	WORTHINGTON, E. D., M.D., Case of
SIMPSON, THOMAS, M.D., Case of Tumour	Biliary Calculi
of the Uterus	WORTHINGTON, E. D., M.D., Remarkable
SIMPSON, SIR J. Y. On the late Sir D.	case of Hypertrophy of the neck of
Brewster 472	the Uterus 311
Sir Wm. Ferguson appointed Sergeant	WRIGHT, WM., M.D., L.R.C.S.E., Vale-
Surgeon to the Queen 284	dictory Address to the Graduation
Spiders web as a Styptic 75	class in Medicine and Surgery 481

#### CANADA

### MEDICAL JOURNAL.

#### ORIGINAL COMMUNICATIONS.

Surgical Cases in the practice of Louis Bauer, M. D., M. R. C. S. Engl. Reported by A. G. Jackes, M. D.

CASE III.

Spontaneous and diffuse osteomyelitis of the tibia caries of the tibio tarsal and tarsal articulations, multilocular abscess.

The exact knowledge of the pathological changes of the bony structure, and its complements, is the result of modern investigation. Most of them we owe to the use of the microscope and to the improved method of preparing pathological specimens by more minute injections, hardening by chromic acid &c.

It is pretty well conceded now that there is no such disease as true ostitis, and that the changes of bone structure by disease, are of a secondary character. There is indeed nothing in the bone per se, that could inflame.

Inflammations concerning the bone in its collective character, must always appertain either to the periosteum, or the medullary membrane that sends its ramifications in every direction of the bony structure, through the Haversian canals. It is within the cellular endowment of the medullary membrane, that those changes are initiated which eventuate into partial or total destruction of the bone; whence that cellular exuberance starts, which culminates in those fungoid granulations with which resorption and isolation of the bone goes on pari passu; whence suppuration emanates which disorganizes the medullary structure and displaces it by pus, and which, when limited in extent, gives rise to bone abscess.

Chassignac introduced the subject with its now adopted name, and furnished the first clinical, anatomical records; but the late Herman

A VOL. IV.

Demme, \* has given most perfect contributions more or less accepted as leading authority.

In comparing the statement of that author, with the clinical character of the case, which is the subject of this contribution, there is a material disparity noticeable, which renders it both interesting and instructive.

Demme presents the clinical character of osteomyelitis so strong, transparent and conclusive, that it seems impossible to confound it with any other disease.

As the most prominent symptom, he mentions deep-seated, continuous and violent pain, which he alleges to be present at a time when other symptoms are imperceptible. This pain is readily increased by pressure upon the affected structure.

From the history of our case it will be seen that there was no unusual degree of pain at any period, and certainly no more than belonged to the disintegrating condition of the joint and integuments. This most essential symptom of osteomyelitis was almost totally absent.

The next symptom mentioned by the author referred to, is the peculiar sensation of the patient that the affected bone is infirm, frail and incapable of bearing the superincumbent weight, hence the entire suspension of locomotion.

Our patient is a remarkably precocious child and able to qualify her sensations with great accuracy, however, she never mentioned such a feeling at any time during her illness.

Next is it alleged, that at the very begining of the disease, there is a diffuse and extensive swelling about the bone with contemporaneous superficial cedema, and a peculiar ashy paleness of the skin.

Although the Doctor took charge of the case but about a month after its commencement, that swelling was then moderate and circumscribed. The ædema was however present, the degree of either was certainly consistent with the diagnosis Dr. Bauer had formed.

Dr. Demme furthermore refers to large and diffuse abscess. The abscesses formed in this case were very small and proved to be direct outlets from deeper parts.

It is alleged that the affections of the adjacent joints, with the gradual detachment of the epiphyses, form a characteristic feature in osteomyelitis. There was no detachment of this kind in the present case.

In fine, osteomyelitis is considered inseparable from constitutional

<sup>\*</sup> Archive of clinical Surgery, by Langenbeck , Billroth and Gurlet, Vol iii. Berlin, 1862.

perturbations, mostly of the ichoræmic character, with corresponding typhoid symptoms. Nothing of this kind was observed in the course of this case, though there were material accelerations of the pulse, but without any other febrile accompaniment whatsoever, and the multilocular abscess seemed to be caused much more by phleothrombosis than any septic contamination of the system.

I will now proceed with the relation of the case, from the details of which the disparity of its symptoms may easily be apprehended.

The patient is a girl not quite eleven years of age. Though belonging to a very healthy family, and herself never before subject to any serious illness, yet she is of rather a delicate and nervous constitution.

At the beginning of August last, she was attacked with repeated rigors, and subsequent fever. From the regularity and typical character of these paroxysms, and the almost free intermissions, the attending physician inferred intermittent fever, and treated it accordingly. The trouble yielded readily to quinine, and seemed to be at an end; when, but a few days later, swellings appeared at the middle of the left tibia and left ankle joint. So clandestinely and painlessly had this symptom set in, that both physician and patient were taken unawares. Forming rapidly into abscess, they were opened and a moderate quantity of ordinary pus escaped.

Up to the 9th of September following, no symptoms of a grave character presented themselves. On this day the patient was transferred to Dr. Bauer's charge, on account of serious illness of the attending physician.

A careful examination being made by the former, the following conditions of the patient were noted: moderate debility, paleness of the surface (which is said to be the ordinary appearance of the child), pulse from 110 to 120 without a rise in temperature, no thirst, no disturbance of appetite or rest, tongue clean, evacuations in good order. When left alone the patient would pass her time cheerfully, but was easily excited by examining or dressing her limb.

At the inner surface of the tibia there was a small aperture surrounded by moderate thickening of the areolar tissue. The sero-purulent discharge was of mild character, without smell and moderate in quantity. There was a similar opening at the ankle joint with more circumferential swelling. Leg and foot moderately ædematous.

It will be perceived that except the accelerated pulse, the objective symptoms denoted no aggravated conditions, and the former might be satisfactorily explained by the excitable temperament of the patient, and the co-existing anæmia. Nevertheless Dr. Bauer attached to the

eedema of the affected extremity diagnostic import, inasmuch as there was no mechanical cause visible; a careful exploration of the affected localities showed the tibia, bared and roughened to a small extent, and the ankle joint perforated.

To all appearance the two abscess, had formed contemporaneously, but without any visible connection, the integuments between the two being comparatively healthy. The one presented itself as a circumscribed sub-periosteal suppuration of small extent, the other, what Volkman would call articular catarrh, with inexplicable disruption of the capsular ligament. This diagnosis was merely nominal, and the Dr. apprehended some graver trouble, although undefined and undemonstrable. Having made a counter opening at the joint, he directed fomentations with oiled silk cover to the affected extremity, gave the strictest injunctions as to hygiene and generous diet, and prescribed quinine with iron.

The case had thus proceeded with little change in its aspect for a fortnight when diarrhea set in. Ascribing the same to the effect of the iron
the Dr. dropped the latter, and added the Liquor opii compositus of
Squibb. On account of some gastric derangement and diminution of
appetite at the end of the third week, the quinine was suspended.
A few days afterwards a large abscess at the left hip was discovered; it
had formed without additional constitutional disburtance and pain, and
to all appearance in one night. The matter was let out by puncture,
and the cavity closed by elastic compression (flannel bandage); it gave
no further trouble. The matter was exceedingly white, without smell,
and measured from six to eight ounces. Its peculiar color was owing to a
large quantity of fat.

Although it was at least doubtful, whether the suspension of the quinine had any bearing upon the formation of that abscess, still it is remarkable that on three similar occasions the discontinuation of the quinine, was almost immediately followed by similar abscess, once in the right subclavicular space, and the last at the right hip.

From that time to the 25th of May, when the amputation was perfor formed, the clinical records of the case furnish very little matter of pathological interest, and are almost entirely limited to the local changes observed. Quite a number of small fistulous openings formed successively along the lower too thirds of the tibia. From the upper apertures, a tolerably large shell of new bone, was removed about three months ago, having become detached. At the ankle joint the swelling and intumescence of the integuments became considerable, being gradually perforated by eight apertures through which the probe readily detected the extensive disinte-

gration of the tarsal bones. With all, the discharge, was comparatively moderate, of tolerably good quality; at various times small detritus of bone, cartilage &c. were eliminated from this locality.

The limb was kept bent at the hip and knee joints, and rested upon its outer surface during the whole sickness. Towards the end of the same, the foot became disproportionately everted, as if the articular connections had been in a measure destroyed.

At this juncture Dr. Bauer proposed amputation, not as an exigency, but as a remedy. The desintegration of the tarsal bones alone, was so great as to preclude all hopes of recovery. Postponement seemed to be so much loss of time. The upper fistulous opening of the tibia had closed and cicatrized after the removal of the piece of loose bone, and there was substantial hope to preserve the knee joint. Moreover the patient was in as good a condition for the operation as could be desired. In these views concurred some of his professional friends whom the Dr. had invited to see the case.

Having obtained the consent of the parents, the operation was performed on the 25th of May.

As soon as the patient was under the influence of chloroform, a thorough examination of the limb was made, when the upper part of the tibia was found to be so extremely soft as to preclude operation below the knee joint. The amputation was therefore made at the lower fourth of the thigh.

The operation passed off without any untoward circumstance and the patient is now in a fair way of recovery.

An examination of the specimen was afterwards made, when the following conditions were found.

The periosteum of the femur presented no marked change, though peeling off more readily than is usually found in healthy bone; on the cut surface, both longitudinal and transverse, there was a high degree of hyperæmia, and a moderate rarefaction of the osseous substance. The medulla presented very little consistency, and a high pinkish color. There was a slight degree of softening.

The knee joint contained more synovial fluid than could be expected in a healthy joint; its composition was however normal. The articular cartilages had assumed a milky color and opacity; they were slightly thickened and softened, they had evidently entered upon the first stage of fatty degeneration; the crucial and capsular ligaments were found to be healthy.

The upper part of the tibia has undergone no changes in form and size, there are no attempts at epiphysial detachment; it is, however, soit and compressible.

Three inches below its superior extremity the tibia is very rough and uneven, from the formation of new bone; there are no external marks of demarcation, both the new and old structures are essentially blended, the deposits of new bone are however more strongly marked at the upper third and at the internal surface than at the external and posterior. At the latter and towards the transverse section (which was made about the middle), caries has fairly commenced upon the new structure, with its consequent osteo-perosis. At the lower end of this fragment there is an ovoid cloaca leading to the medullary canal. At the point of section there was a soft homogeneous pus, and the posterior circumference of the old bone, the rest being carried off. At the corresponding part of the fibula, there is moderate thickening of the periosteum, and the formation of an involucrum, which, however, embraces only the opposite side of the tibia; the medullary structure of the fibula presents no marks of disease.

The lower third of the tibia exhibits mere fragments of the old bone in the shape of disconnected sequestra, embedded in pus and luxuriant granulations, and surrounded by new bone formation.

From the medullary cavity, three cloacæ lead to the surface of the tibia, of which one penetrates the tibio-tarsal articulation. The tarsal bones are entirely disorganized, osteo-perotic and soft from sero-purulent infiltration. Most of the inter-tarsal articulations are opened; the articular cartilages partly destroyed, partly detached, as loose fragments hanging about.

The osteo-plasm of the tibia in the neighbourhood of the ankle joint is very exuberant and connecting with the lower extremity of the fibula.

From this almost total necro-biosis of the tibia, it is readily seen that the periosteum was only in a measure involved in the process in question, and was capable of supplying the material to an almost complete involucrum of the disorganized tibia, for it was everywhere perfect, except where perforated by the cloacæ; it was neither thickened nor detached from the subjacent bone.

The causation in this instance is by no means clear. Dr. Bauer advanced the opinion that there had been a thrombosis of the medullary veins, which by ulceration brought about this disease.

The comparative painlessness of the disease may be accounted for by the early perforation of the medullary cavity, which obviated in a measure the consequence of enclosed pus.

#### CASE IV.

Traumatic osteomyelitis of the right femur; slight loosening of the lower epiphysis; empyema of the knee joint; recovery.

This case offers no pathological or clinical peculiarities; it is, however,

characterized by the regularity of its phases, and therefore serves as a prototype of this class of disease.

The comparison of this with the previous case will place the latter in strong relief.

The patient is a jeweller by occupation, nineteen years of age, descended from healthy parents, and though of a delicate constitution, has nevertheless been healthy up to the 1st February last. On this day, while participating in gymnastic exercises, he fell heavily upon his knees, more particularly on the right, he experienced instantaneous and keen pain, which, however, soon subsided.

On the fourth of February he was attacked with stitching pains along the right femur, which steadily increased to an alarming degree, forcing him to keep his bed. On the eighth a physician was called in, who ordered four leeches and a blister, without relief. On the 16th of March Dr. Bauer took charge of the case. The appearance of the patient denoted severe and continuous suffering, he looked pallid and anæmic, and was much reduced, bed sores had already made their appearance at the sacral region, his pulse ran up to one hundred and thirty, and he had a short hacking cough, there were however no changes noticeable in the His appetite was entirely destroyed and his bowels and kidneys acted sluggishly; the very expression of the countenance manifested the most intense agony. At intermissions of a few minutes he shrieked loudly, and complained of cramps in the affected extremity. The right thigh was swelled to four times the dimension of its fellow, the leg and foot were edematous. The soft structures of the thigh were partly indurated, partly undermined by liquid, especially along its outer aspect, and in the popliteal space. The extremity was exceedingly tender to the touch, and motion of the knee joint unbearable; the integument was partly of an ashy, and partly of a reddish brown color.

The Doctor ordered large doses of quinine and morphia; poultice to the extremity; and put the patient on a water bed.

On the following day, the patient being under chloroform, a long and deep incision was made on the outer aspect of the thigh, and a large quantity of decomposed matter, with rags of necrotic tissue, were discharged. This gave the patient material relief, and for the first time after many weeks he had rest and sleep. In about a fortnight an undue mobility, with a rotation of the lower part of the limb, was noticed partly above and partly at the knee joint; very soon the latter filled with fluid, which gave new trouble and pain.

The puncturing of the knee joint, and copious discharge of very fluid pus, gave great relief. From time to time new collections of pus formed

above, below and behind the knee joint, requiring in all seven incisions and punctures. Gradually the discharge from all these openings has diminished and improved in quality, most of them have entirely closed, a few only remained, surrounded by infiltrated and ædematous tissue, discharging a clear, plastic and inoffensive liquid. The epiphysis has again consolidated; the joint is obliterated and rendered immovable by intra-articular adhesions: the bone is three times its normal size, and more especially in the neighbourhood of the knee joint, where abundance of new material has formed. The patient has most substantially improved in health, vigour, appearance and weight.

The treatment throughout the case has been sustaining, and tonic, quinine and iron being the chief remedies. The local treatment consisted in promptly giving free vent to matter, and the most scrupulous attention to the comfortable position of the affected extremity. In the beginning a straight splint of sheet iron was used, but had to be discontinued on account of the numerous discharging openings. The simple inclined plane answered the indications best, favoring the discharge of matter.

Those who have carefully perused the previous case, will not be astonished that no sequestra came away. Indeed the luxuriant granulation which is set up in the Haversian canals by osteomyelitis, destroys with great rapidity the old bone almost to a vestige, whilst the periosteum supplies in abundance the material for the new bony cylinder. It is in diffuse periositiis where we have to look for sequestra, not in osteomyelitis.

#### CASE V.

Intra-uterine fibroma of six years standing; repeated hemorrhages; final enucleation.

The patient is forty-five years of age, of a wiry constitution and active habits. She has enjoyed the most perfect health until within the last six years, has regularly menstruated, and has borne four children, the youngest being eight years old.

About six years ago, Dr. Bauer was called upon to see her; her menstruation had been regular up to that period, and continued so during the succeeding two years, but it had become more painful and copious, and during the intervening period profuse leucorrhea had prevailed, for which his advice was desired.

On examination, the uterus was found of a larger size, and somewhat harder in texture at the posterior circumference, but movable and without tenderness. The remaining parts of the pelvic cavity seemed to be healthy.

On introducing Simpson's sound, the uterine cavity proved to be longitudinally enlarged, but no other change was distinguishable. There was an undue discharge from the uterus of a transparent albuminous nature, and the neck superficially excoriated. Dr. Bauer held that there was an intramural fibrous tumor in the process of development, which accounted for all collateral symptoms, and declared that the troubles could only be palliated, until the removal of the tumor should be found practicable on a future occasion.

From that time he has seen the patient at intervals of months and had thus the opportunity of tracing the persistent growth and development of the tumor. On three different occasions the hemorrhage became so profuse and exhaustive as to require injections of persulphate of iron into the uterine cavity, tampon, and kindred appliances. On the last occasion about a year ago, incisions into the cervix uteri and subsequent dilatation with laminaria and compressed sponge had to be resorted to, to arrest the hemorrhage, preparatory to the prospective removal of the tumor, which however proved impracticable on the attempt being made. The reasons being the indistinctness of the border of the tumor, its deep seat in the walls of the uterus and the inaccessability of its lower extremity.

The dilatation had, however, a marked effect upon the condition of the patient, in completely arresting the hemorrhagic flow. For more than a year after this the patient was so much improved, as to be capable of fulfilling her ordinary household duties.

Of late however there was superadded to the original symptoms, a painful pressure upon the blader and rectum, a feeling of sinking as if something was protruding, and a most feetid discharge from the vagina.

Having in the mean time removed to New York, she sent to a neighbouring physician for relief, who unequivocally pronounced it a case of cancer. This opinion induced the patient to send for her former medical adviser, who corrected the diagnosis without great difficulty. Indeed the case was clear enough to one who had seen and explored it in different stages of its progress, but was well calculated to startle and mislead a physician who had no other guide than the present condition.

On placing the patient in a convenient position on the table, and exposing the tumor by means of Sim's vaginal speculum, a disintegrating mass was exposed which was the cause of the fetid smell. The base of the mass was firm and apparently nodulated; three fifths of the os uteri seemed to be involved and identified with the tumor, but in front there was access to the uterine cavity, admitting the sound some five or six inches. The surface was perfectly smooth, the uterus could be raised

with the tumor, and its base felt two inches and a half above the pubic symphysis somewhat to the right of the linea alba.

The tumor being thus sufficiently accessible, Dr. Bauer proposed its removal; this was accepted and the operation performed on 26 June, ult.

The patient was placed in the recumbent posture in a good light. By means of Muzeux double hook, the tumor was grasped and drawn down and backward, the doctor then introduced his right forefinger into the uterine cavity, and succeeded in loosening the anterior attachments and gradually increased the separation in every direction; but not before the posterior attachment to the neck had been severed by the knife, could the tumor be circumvented and so completely isolated as to be withdrawn.

The patient was all the while under chloroform, experienced no pain, and the loss of blood certainly did not exceed two ounces. The vagina was then filled with cotton wool, and the abdomen surrounded by a well adjusted bandage holding compresses in situ.

Since the operation there has not been a single symptom to mar the happy results.

The exhibition of the specimen to the New York Pathological Society acquired a more vivid interest from the fact that a similar case, but with widely different practical results, was introduced.

The tumor presents the usual capsular investment, which, however, is broken through at one extremity, where the slough had commenced. It weighs one and a half pounds, and measures seven and a half inches in length and four and a half in width, is perfectly smooth, and on its surface vascular. On its anterior surface a portion of the uterine mucus membrane is still adherent, whereas the rest is covered with connective tissue. The microscope disclosed a purely fibrous structure without cellular and fat components.

That gradual dilatation by appropriate substances lends a most valuable aid in rendering intra-uterine growths accessible, is self-evident; and in some cases it is soon followed by their partial or total expulsion. But lately Dr. Bauer removed a medium sized uterine polypus, which was forcibly expelled from the uterine cavity consequent upon dilatation and injection of the tincture of iodine.

#### Chemical Selections: By E. S. BLACKWELL. Montreal.

The bituminous schists of Vagnas (Ardêches) are now being worked with very favorable results, producing about 10 per cent. by volume of raw paraffin oil. The texture of this schist is compact and massive,

very similar to that of earbonized and compressed peat, having numerous vegetable filaments disseminated through it, which help to prove its origin from peat. The schist is distilled in a large retort; the tar is separated by means of sulphuric acid and soda; the product is then redistilled and the result is a white opalescent oil, having rather an agreeable ethereal odour, with a specific gravity of 0,825. Its point of combustion is higher than that of American oil, the former being 158° F., the latter 113° F. The illuminating power of this oil is that of nine ordinary wax candles. The secondary products in this manufacture are useful; they are principally coke, acid tars, paraffin, &c., &c.

Dr. Borlinette, of Padua University, has succeeded in making a new and very forcible powder for guns or for blasting purposes. He went through a series of experiments, beginning with a mixture of chlorate of potash and tannic acid, but this was found to be too detonating; he then tried substituting gallic and pieric acids in the place of tannic acid, but found it was even then too dangerous; his experiments ended by his making a powder of these constituents:—Nitrate of potash, I0 parts, pieric acid 10 parts, bichromate of potash 8.5 parts. This powder does not explode by friction or percussion, and leaves only a minute residue after combustion. During the combustion, at a red heat nitrate of potash is converted into nitrite of potash and oxygen, also a portion of the oxygen in the bichromate of potash unites with the carbon of the pieric acid, giving rise to a white heat, which completes the decomposition of nitrate of potash. The bichromate of potash is necessary to give it an expansive force.

Cryptopia.—A new alkaloid in opium has been discovered by Messrs. T. & H. Smith, which they have named cryptopia. The formula of this new alkaloid is  $C_{2\,3}$   $H_{2\,5}$   $NO_5$ . Its primary form is an hexagonal prism, and it is obtained in this condition if crystallized slowly in a tube from its alcoholic solution. Messrs Smith have succeeded in making the sulphate, muriate, nitrate, the bolactate and the acetate; these all crystallize in distinct forms, but the alkaloid itself has much better crystalline forms than any of its compounds. Four or five tons of opium only yielded five ounces of muriate of cryptopia.

Toluol and Benzoate Sulphurous Acid.—R. Otto (C=12. C=16.) Toluol Sulphurous Acid, heated with water to  $150^{\circ}$ C. in sealed tubes, splits up into toluol sulphuric acid, and a body of the composition  $C_{\tau}$   $H_{s}$  SO, according to the following equation:— $2C_{\tau}H_{s}$   $SO_{z}=C_{\tau}H_{s}$   $SO_{z}+C_{\tau}H_{s}$  SO. The new body is not acid, is insoluble in water, readily soluble in hot alcohol, from which it separates in rhombic crystals. Zine

and sulphuric acid convert it into metabenzyl sulphydrate. The decomposition of benzoate-sulphurous acid takes place in the same manner. (Zeitschr. Chem., N. F., iii, 262.)

T. M. Crofts has been trying some experiments, which have been published lately, (Comptes R. lxiv. 700.) with the ethers of the acids of arsenic. He finds that the action of dry arsenic acid upon silicic ethide takes under pressure at 230° C., a gas escapes, probably ethylene, and silicic acid is precipitated. On distillation, arsenious ethide is obtained; it boils at 167°, has a specific gravity of 1.224 at 0°C., and is entirely decomposed by water. Its formula is 3 ( $\rm C_2\,H_5$ ) As O $_{\rm 3}$ . Mr. Crofts also formed arsenic ethide 3 ( $\rm C_2\,H_5$ ) As O $_{\rm 4}$  by heating ethylic iodide, diluted with twice its volume of common ether, and argentic arseniate, slightly in excess, together in closed tubes to 120° C. The contents of the tube are extracted with ether, and the remaining liquid, after evaporation in a cement of carbonic acid, is distilled under diminished pressure. Arsenic ethide under ordinary pressure boils at 235°—237° but partially decomposes. Its specific gravity at 0° C is = 1·3264. It mixes with water in every proportion.

M. Nickles read a paper a short time ago before the Academy of Sciences at Paris "on some new solvents for gold." He has discovered that gold is soluble in ethereal perchlorides and perbromides. As the gold dissolves in the manganic compounds, the green colour of these gradually disappears, and a yellow or red solution of gold is left behind.

If the ether is then evaporated from this solution and the residue sufficiently heated, a coating of metallic gold is left at the bottom of the vessel. A great many sesquichlorides and sesquibromides also dissolve gold, those which are easily reduced answering best. The cause of the solution is evidently the instability of the per- and sesquichlorides and bromides, for which free chlorine and bromine are easily separated. Ethereal periodides also dissolves gold, forming an iodide, showing that nascent iodine is a solvent, although that metalloid in the ordinary state does not act on gold. An ethereal solution of hydriodic acid also dissolves gold leaf, owing, of course, to the instability of the acid and the liberation of free iodine in the nascent state.

#### REVIEWS AND NOTICES OF BOOKS.

Obstetrics, the Science and the Art: By Charles Meigs, M. D., lately Professor of Midwifery and the Diseases of Women and Children in Jefferson Medical College, Philadelphia, &c., &c., &c. Fifth Edition, revised, with one hundred and thirty illustrations. Philadelphia: Henry C. Lee; Montreal: Dawson Brothers. 1867.

Dr. Meigs is venerable in years and his experience in the particular department of medicine, which he taught so long, has been equal, if not superior, to that of any other Obstetrician on this continent. Hence we naturally look up to him as one capable of imparting much useful information, and of giving many valuable practical suggestions. Although this is the fifth edition of the present work, it is the first time that we have had the pleasure of perusing it. Its author made his first literary reputation on issuing his well-known book on the Diseases of Women, a work which was a valuable contribution to the medical literature on that most important subject, even although its style was peculiar, and at times bordered all but on the grotesque. In the present volume Dr. Meigs has, we are glad to say, not adopted this style, but has written it in plain and comprehensive language, and has arranged his subject matter into paragraphs, each of which are numbered, so that with ease and facility the particular portion of any subject can be hunted up in a moment. It is to the student that our author has more particularly addressed himself-but to the practitioner we believe it would be equally serviceable as a book of reference. No work that we have met with so thoroughly details everything that falls to the lot of the Accoucheur to perform. Every detail, no matter how minute or how trivial; has found a place: This is a decided desideratum, for often little things will occur to puzzle one, and it is no small advantage to be able to turn up and ascertain the opinion of such an experienced accoucheur as Dr. Meigs. At page 339, he says:-" The young practitioner and the student should be warned against falling into the habit of beginning too early to support the pereneum. If the part should be too early pressed upon with a napkin it might become heated, and thus lose its disposition to dilate: it is assuredly unnecessary to support it until a certain degree of extension has put it in some danger of being lacerated." This is a piece of advice which is too often disregarded, and we can with confidence recommend its adoption. We are glad to notice the emphatic manner in which Dr. Meigs writes with reference to the time the parturient woman should remain in bed. Many patients feel so well on the third day after

confinement, that it is with difficulty they can be convinced of the necessity for still further repose. If it is at all possible, not on any account should a lying-in patient be allowed to leave her bed till the ninth day. Dr. Meigs says, regarding it: "It is a safe rule, the keeping of the bed for many days \* \* \* \* . Hæmorrhages, chill, prolapsions, and an evil train attend those imprudent women who leave the lying-in couch too early. A rest of nine days is a short rest after nine months of fatigue, crowned by the exhausting conflict of a labor." There are, however, some parts in the work that have evidently escaped revision and are not up to our knowledge of the present day. His remarks regarding both the application of chloroform and ether in labor are directly against their employment, first because he believes it is unnecessary, as the average duration of labor is but four hours, and the average number of labor pains fifty, lasting thirty seconds each. According to this estimate there would be twenty-five minutes of convulsed pain, quite an insufficient length of time to demand etherization. Second, he believes it improper, and thirdly, refers "to the doubtful nature of any processes that the physician sets up to contravene the operation of those natural and physiological forces that the Divinity has ordained us to enjoy or to suffer." This, we need hardly say, is against our own ideas, and we are sorry that so eminent an accoucheur should still adhere to them-for such has been his opinion ever since the introduction of chloroform. The work is exceedingly neatly got up, and is more than worth its cost.

Practical Dissections: By RICHARD M. HODGES, M. D., formerly Demonstrator of Anatomy in Harvard University. Second Edition. Philadelphia: Henry C. Lea. 1867.

The first edition of this work was issued in 1858, and its success seems to have called for a second edition. At this we are not at all surprised, for after a careful examination of the work we find it to be really excellent, and comprising in a limited space that which usually presents itself to the medical student, while pursuing the subject of practical anatomy in the dissecting room. Its smallness and conciseness without being at all meagre, is one of its great recommendations. All minute analysis and the details of arterial distribution, beyond what an ordinary system exhibits, or of nervous ramifications which only special dissection can demonstrate, have properly been omitted. We can very cordially recommend it to the notice of Canadian medical students.

#### PERISCOPIC DEPARTMENT.

### Surgery.

ON THE DIAGNOSIS BETWEEN HERNIA AND ENLARGED INGUINAL LYMHHATIC GLANDS.

By John W. Ogle, M.D., F.R.C.P., Physician and Lecturer on Medical Pathology at St. George's Hospital, etc.

At the recent meeting of the South-Eastern Branch of the Association, two very interesting cases were related by Dr. Bowles of Folkestone, illustrative of the difficulties which may arise in diagnosing hernia, by reason of the presence of enlarged lymphatic glands in the groin. In the last of these, the patient had worn a truss for several years owing to a swelling as large as a small orange in the inguinal region, which consisted of enlarged glands caused by gangrene of the toe, no hernia ever having existed. I am able to "cap" this case of Dr. Bowles by another of a like kind, in which, however, the result unfortunately proved fatal. The case occurred in St. George's Hospital, and the patient died on the day after admission. It was as follows:

William A., aged 80, was admitted October 5th, 1846. He stated that for ten years he had worn a truss over a tumour occupying the right inguinal region; that, three days before admission, this tumour enlarged, and became red and painful, and that pain in the abdomen and occasional vomiting had shortly come on. No relief from the bowels had been obtained since the symptoms began. When admitted, his expression was anxious and his pulse weak, and there was a tumour, about three inches in length, in the usual situation of an inguinal hernia. An incision was made in the long axis of the tumour ( in order to ascertain its nature), which was found to consist entirely of enlarged suppurating inguinal glands. During the night, the sickness returned, the patient became much worse, and he died at 11 A.M. on the next morning.

On post mortem examination, the lungs were found to be much congested and the heart flabby, and extensive granular disease of the kidneys was met with. The spleen was soft, and adherent to the abdominal parties. The peritoneum and intestines were quite healthy. The enlarged glands were found to contain deposits of pus. The other parts of the body were healthy.

In this case, it is a matter of interest to inquire what was the cause of death. Into this question, however, I do not propose to enter, merely stating that I feel a difficulty in determining the point. The previous

history was at the time acknowledged to be very imperfect; and to what extent pyæmia may have acted in producing the fatal issue (suffering as the patient was from granular disease of the kidney), I will not venture to affirm. I merely quote the case as proving how one may be misguided as to the nature of inguinal hernia, and as showing for how long a time a patient may wear a truss for such a tumour which is not a hernia, and what may be the injurious results of such a procedure.—British Medical Journal.

#### A NEW REMEDY IN GONORRHŒA. BY J. S. PRETTYMAN, M. D.

In July, 1859, while narrowly observing the effects oil of erigeron administered in a fearful homoptysis, I was led to suspect that it would prove a useful remedy in the treatment of gonorrhea. Acting upon this presumption, I immediately commenced giving it to a patient then under my care, in whose case all the vaunted specifics had most signally failed. He improved at once and was speedily cured. Since that date I have prescribed it in about fifty cases, with unvarying success. It arrests the discharge in about 72 hours, and effects a cure in from six to eight days. I do not recommend it as a specific in all cases, but design merely to bring it to the notice of the profession as an exceedingly valuable medicine in this disease. Of course all scientific medical practice is based upon the well known pathological condition of the structures involved, and this is our unerring guide. When in recent cases the urethral inflammation is severe, my plan is to precede the remedy with a full dose of some active hydragogue. A good formula is: R. Pulv. senna, Dij: pulv, jalapa, Dj; puly, aromaticus, gr. x. M. Add a gill of boiling water and a teaspoonful of sugar, and when sufficiently cool, agitate and swallow at a dose. As soon as this operates, give ten drops of the oil on sugar, and three hours later a full does of spts. aether. in infus. althea, and so on every three hours alternately until the urethral irritation is allayed. leave off the latter and continue the oil until the cure is complete. the case is not recent, or there is but little urethral irritation, the oil alone is sufficient.

I have used it also in combination with copaiba and other articles, and found such preparations to answer a good purpose, but no better than the oil alone.

The oil which I use is reputed to be that of the Erigeron Canadense but I presume that from the Philadelphacum is equal, if not superior, for this purpose.—(American Journal of Medical Sciences, July 1866.)

CASE IN WHICH A PENNY COIN IMPACTED IN THE THROAT OF A CHILD WAS DISCOVERED AND REMOVED BY THE AID OF THE LARYNGOSCOPE.

BY GEORGE JOHNSON, M.D., F.R.C.P., PHYSICIAN TO KING'S COLLEGE HOSPITAL,
PROFESSOR OF MEDICINE IN KING'S COLLEGE.

F. C. W., a fine healthy boy, aged a year and eight months, was brought to me on the 2nd May by his parents, who told me that, two days before, he had swallowed a copper penny. When the child was taken to his mother by a servant immediately after the accident, he was black in the face; his eye-balls apparently starting out, and he seemed to be in imminent danger of suffocation. These alarming symptoms soon subsided, and when the medical attendant arrived, he supposed that the coin had passed into the stomach.

The child's father, feeling alarmed and anxious, took him to one of the hospitals east of Temple Bar, where the house-surgeon, after learning the history, said there was nothing to be done; but he desired that the patient might be taken to him again on the following day.

When the child was brought to me, about fifty-two hours after the accident, I ascertained that, since the coin had disappeared, he had been quite unable to swallow solids, while the swallowing of liquids was attended with difficulty, and often excited coughing. Some water that I gave him to drink, made him cough. There appeared to be much irritation about the throat, and there was a frequent discharge of salivary mucus from the mouth; this discharge was occasionally tinged with blood. Respiration was attended with a moist rattling noise in the throat; there were frequent fits of coughing, which almost entirely prevented sleep: the child looked weary and anxious, and the distressing symptoms had gone on steadily increasing. With such a history, it could scarcely be doubted that the coin was impacted in the throat. Up to that time, the only treatment had been the administration of a dose of castor-oil.

Using a piece of soft wood to keep the mouth open, I endeavoured to reach the coin with my finger; but failed to do so. Then, while keeping the mouth open by the wooden gag between the teeth, I introduced a small laryngeal mirror. At first, I found that the surface of the mirror became instantly smeared over and dimmed by the profuse mucous secretion from the throat, so that I could see nothing. I next swept the mucus out of the throat by a brush on a bent whalebone; then quickly introducing the mirror, I saw the coin sticking in the upper part of the æsophagus, the surfaces front and back, and the upper margin just below the opening of the larynx.

I then took a pair of long, slender, curved forceps, opening front and

back, which I had purchased from Messrs. Weiss a short time before, and guiding the forceps by the throat-mirror which I held in my left hand, I seized the edge of the penny and brought it out.

Immediately after the removal of the coin, the child retched and coughed violently for a few seconds. I then gave him some milk and water; and it was pleasant to see the eagerness and the ease with which he drank it. From that time, all symptoms of irritation rapidly subsided; but it was not until the third day after the removal of the penny, that he could be induced to swallow solids. When I saw him again, a week after his first visit to me, he had lost all his discomforts, and he looked a model of health and happiness. It is probable that the alarming symptoms of suffocation, which occurred immediately after the coin got into the throat, resulted from the partial closure of the larynx while the foreign body was sliding over the epiglottis on its way to the gullet. That the continued impaction of the coin in the gullet would have been speedily fatal by the extension of inflammation and swelling to the larynx, scarcely admits of a doubt.

It is commonly supposed that the larynx of a young child cannot be successfully examined by the mirror. Without doubt, a laryngoscopic examination is more difficult in the case of children than in adults; but I find that, with care and tact, it is possible to explore the throat of even very young children. I have recently, on two occasions, in consultation with Dr. Arthur Farre, examined without difficulty and with completel success the larynx of an infant five months old.—British Medical Journal, July 6, 1867.

#### USE AND ABUSE OF POULTICES.

By Dr. RICHARDSON.

In his lectures recently delivered at the College of Physicians, Dr. Richardson made the following remarks on the subject of poultices:

The application of moist heat in the form of poultice to suppurating parts requires, I think, remodeling, in order that it may be placed on a true scientific basis. I am afraid that the common recommendation, "You must put on a poultice," is too often among us all an easy way of doing something about which we are not quite sure, and concerning which it were too much trouble to think long. From what I have recently observed, I fear that mischief is often done by a poultice which might well be avoided. The people have always a view, that a poultice is applied to "draw," as they say—a term in truth which, though very unsophisticated, is in a sense a good term, for it means what it says. The question for us is, whether it be sound practice to carry out as a general rule the "drawing" process, either by fomentation or by poultice.

When a part is disposed to suppurate, the first step in the series of changes is an increased flow of blood through the capillary surface, followed by obstruction, and thereupon by an excess of sensible heat derived from the friction that is set up. Then follows transudation of liquor sanguinis into the connective tissue, and its transformation, under the influence of heat, into what is called purulent fluid. When to the part in this state we apply moist heat, we quicken suppuration, mainly by upholding the temperature; at the same time, we secure the transference of water from the moist surface into the fluids of the inflamed part, by which tension of tissues is produced, and in the end yielding of tissue at the weakest point.

When the suppurating surface is circumscribed, the rapid induction of the process may be attended with little injury; when the surface is large, and when the exuded fluid is thrown into loose structures where it can burrow readily, the practice, I think, cannot be good to extend the mischief. Hence, in the treatment of carbuncle and phlegmonous erysipelas, it cannot, I opine, be sound practice in the early stage to apply moist heat. Experience also, not less than principle, warrants this conclusion.

In cases of carbuncle especially, I have of late altogether avoided the application of moist heat in the early stage, I feel assured, with good results.

But when in the course of local disease suppuration is actively established, and is naturally circumscribed; when the increased temperature of the part has fallen to or below the natural temperature—then the value of moist heat comes on with full force; then the tension which is exerted determines the escape of fluid at the weakest point of the surrounding tissue, and, when the fluid escapes or is liberated by the knife, the escape for a long period is aided by the application of moist heat.

The continued application of moist heat for a long time after the escape of purulent fluid is again, I conceive, indifferent practice. It sustains discharge; it sets up unhealthy decomposition of fluids; it produces a thickened, soddened condition of skin, most favorable to the production of sinus; and it retards recovery. When a surface is freely open and suppurating, dry, and not moist heat is the remedy. We are in want in these cases of a simple invention; we require something which we can apply as readily as a poultice, which shall keep up the temperature of the part, and at the same time take up moisture, and gently dessicate without injuring the tissues.—American Journal of Medical Science, Oct., 1866; from British Medical Journal.

#### Medicine.

#### MEDICAL TREATMENT OF CHRONIC DIARRHŒA WITH CREASOTE.

Dr. G. Westmoreland reported to the Atlanta Medical Society a case of chronic diarrhea—treated with creasote. A young man, aged about twenty-two years, had suffered for six months with chronic diarrhea, contracted at Apalachicola, Florida. He had undergone the usual dietic management, with astringent, alterative, opiate and tonic medication, without any permanent benefit. Under the use of two or three drops of creasote, suspended in half an ounce of acacia mucilage, the discharges were measurably controlled, and his strength greatly improved.

He mentioned this case more with a view of calling attention to the action of creasote in bowel affections, than to anything of interest connected with the disease itself. It had been the practice of some surgeons in the Confederate army to use this remedy in very large doses for the cure of obstinate, acute diarrhæa and dysentery. This practice, not being general, and not having heard or read anything of this treatment in civil practice, it is desirable that the experience of members should be given.

Dr. W. F. Westmoreland stated that at Aberdeen, Mississippi, in 1862, by the urgent request of an Assistant Surgeon in his hospital, he consented to the administration of heroic doses of creasote, in a case of malignant dysentery, in which excessively painful discharges occurred at intervals of only fifteen minutes. The patient was apprised of his danger, and of the seemingly hazardous experiment that was concluded upon. His consent being obtained, a teaspoonful of creasote in a table-spoonful of water was administered. In four hours the pain was much less and the evacuations reduced to half hour intervals, when the same quantity was repeated. This portion lessened the frequency of the discharges to one every two hours, and relieved almost entirely the excessive pain accompanying them. The patient was considerably exhilarated, exhibiting symptoms of ordinary intoxication. The quantity was reduced to thirty drops, and kept up at proper intervals to keep the bowels restrained until convalescence was perfectly established.

He had adopted the same plan with several cases in the hospital under his charge in Atlanta, with similar results in some, while in others no benefit was derived. In a few instances the symptoms were perhaps aggravated.—Atlanta Med. and Surg. Journal.

### ALTERATIVE LAXATIVE PILLS. By Gilman Dayers, M. D.

In the course of a long practice, extending over nearly thirty years, I know of no want that I have more constantly felt than that of some means by which the bowels could be kept in regular order without producing irritation or debility; especially in females and in sedentary gentlemen, who, with the necessity of unremitting brain-work, cannot, or at any rate do not allow themselves sufficient recreation and exercise to keep the system in a healthful state. To meet this want I prepared, three years since, the following formula: B. Pil. aloin cum ferro, gr. xxiv.; ext. nucis vom. alc., gr. vi.; pulv. ipecac., gr. vi. M. Fiant pil. No. xviii. Dose, a single pill.

In order to insure as uniform and perfect a result as possible, I procured the services of the excellent practical pharmaceutist of Boston, Mr. Hunnewell, whose aloin and iron I had used. From that time he has continued to make the pills for me, and to my entire satisfaction. So exactly and perfectly have they supplied the want that I had so long felt, that I have thought it worth while to offer them to my professional brethren, and I do so with entire confidence that none who use them will be disappointed in the result.

The pills are small, about one half the usual pill size. One of these, taken each night, keeps the bowels in a regular condition, operating without pain, and of course chiefly by its tonic power; while the whole system gently but surely feels the strengthening effect of the iron and nux vomica.

I think the formula cannot fail to commend itself to those who have considered the causes of this torpor of the bowels in the class of patients to which I have referred; and I am sure no one will be disappointed who will give the pills a faithful trial. I presume they can be obtained in any desired quantity of Mr. Hunnewell.—Boston Med. and Sur. Journal.

## CHLORATE OF POTASH AS A REMEDY IN CATARRH OF THE BLADDER.

By S. F. STARLEY, M. D., of Fairfield, Texas.

I would call the attention of the profession to the chlorate of potash used as an injection in catarrh of the bladder. I was led to make trial of it last summer (1866) in a case that had resisted the whole routine of treatment laid down in our best works. The patient was an intelligent lady, of high nervous sensibility, aged about twenty-six years. The dis-

ease appeared soon after her first confinement, and I suppose resulted from prolonged pressure of the child's head against the neck of the bladder, as she informed me that her labor was a very protracted one. The affection was of more than twelve months standing when she placed herself under my care. She had been treated by her family physician in another county before she came to consult me, and I was informed that the treatment had included a trial of the uva ursi, copaiba, buchu, tinct. muriate of iron, etc., but no local application had been made to the interior of the diseased organ. Upon examination, I found the neck of the bladder exceedingly sensitive and the soreness extending in a less degree over the entire organ. The urine was thickly loaded with mucus, and pus globules were deposited in abundance at the bottom of the sediment. I treated her for more than two months, employing every remedy recommended by our best authors, and enforcing the strictest regimen. As a trial remedy, I used injections of nitrate of silver into the bladder, commencing with a weak solution, and gradually increasing the strength, until a solution of thirty grains to the ounce was tolerated. This remedy afforded some relief from the tormenting urinary tenesmus, but produced no permanent change in the quantity of deposit in the urine, and proved to be altogether inadequate to effect a cure.

Despairing of success with the usual remedies, I determined to test the effect of chlorate of potash, injected into the bladder. Accordingly, I prepared a solution of the strength of 3 i to 3 viii of water and injected four ounces of it into the bladder, directing the patient to retain it for half an hour. It gave scarcely any pain, and at my next visit I found that my patient was better than she had been for weeks, and that there was less mucus deposited in the urine. I then injected six ounces of the chlorate solution, and directed her to retain it as before. The next day I found her still more improved, and as the bladder was found to be perfeetly tolerant of the remedy, I directed her to retain it for one hour. By my next daily visit, she had experienced an amount of relief that rendered her buoyant and hopeful. After continuing this treatment for . a few days longer, she was able to bear a specular examination of the cervix uteri, which was found to be in a state of granular erosion. This was cured by a few applications of the nitrate of silver crayon. The injections of chlorate solution were continued daily for about two weeks, and afterwards once in two or three days, all other medication being suspended, in order to test the efficacy of the chlorate. The patient improved steadily under this treatment, and in one month from the time it was commenced was quite well.

It is proper for me to state, that since then I have tried the chlorate injections in a severe case of the same disease in an elderly lady, and that although some benefit followed its use, it did not produce the prompt effect that it did in the first case. The patient was finally cured by the usual course of treatment, including strong injections of sol. nitrate of silver into the bladder. The above is written with the hope of inducing others to test the efficacy of chlorate of potash as an injection in one of the most painful and distressing maladies that flesh is heir to, and one that too often baffles the skill of the best informed physicians.—Southern Journal of the Medical Science.

ON THE VALUE OF TARTAR EMETIC IN COMPRESSION OF THE BRAIN, AND IN CONTROLLING CONVULSIONS AND MANIACAL EXCITEMENT DEPENDENT THEREON.

By Hugh Croskery, L. R. C. S. I.

G. H., a young white Creole gentleman, had been suffering for some days from languor and pain in the right hypochondrium. On Thursday morning, the 31st. of October, 1861, he left his bedroom, about six o'clock, in his usual good health and spirits, and partook of the accustomed Jamaica dish-a cup of good coffee-usually served at that hour of the morning. He went out for a stroll, and was seen to walk with a steady and buoyant gait. An hour afterwards he was found, about five hundred yards from the house, in a fainting state, and with his body lying on the pathway leading through a pasture on the hill-side. Being in the house at the time, I was called to him at once, and found him with contracted pupils, a feeble pulse, a cold, pale skin, and completely unconscious. He was lying where a short time before he had been discovered; with his body up and down the hill, and in such a position asif coincident circumstances did not point to a different conclusion-to lead to the belief that he had either lain himself down to rest there, or that he had felt faint, and had fallen down at the spot where he had been found; his head rested on a place by no means hard, and his hat was found not far from his person.

When I first saw him, he was in a state of syncope, which might have been the result of a heavy fall, and consequent concussion of the brain, or of sudden faintness from the exertion made use of in ascending or descending the hill. His state of health for some days previous—and the fact that no cuts or bruises about the head, or stones about the spot, could be discovered—tended to convince me of the probability of the latter being the cause of the mishap. With this belief he was kept a short

time where he was, in the horizontal posture, and a stimulating salt was applied to the nostrils. In a very short time, however, it became quite evident that he had suffered, in the first instance, a severe concussion of the brain, and that some rapid effusion was taking place as a consequence; the symptoms of concussion being rapidly succeeded by those of compression. (It was discovered afterwards that, in running down the steep ascent, the heel of his boot had slipped on the root of an orange tree which projected out of, and ran for some distance along, the ground, and that he had been, in consequence, precipitated down the hill-his head falling backwards, heavily, on the ground.) Unconsciousness soon merged into insensibility; the pupils became widely dilated; the face and neck suffused and red; and the body violently convulsed. I had him removed into the house at once, and, before many minutes had elapsed. twenty ounces of dark blood had been taken rapidly cum pleno rivo, from the arm, and a bolus, of fifteen grains of calomel, had been washed down his throat. The convulsions, however, continued to be frequent and violent; and before another hour had passed, twenty ounces of blood, as dark as before, had, for the second time, been abstracted from the arm.

About nine o'clock, A.M., the convulsions had ceased, but a deep coma remained; the breathing continued to be stertorous; the pupils dilated; and the muscles, principally of flexion, rigid and contracted. A cold evaporating lotion had, from the first, been applied to the head; and evaporation was still encouraged and aided by the steady action of a palmetto fan.

An enema, containing olive oil, turpentine, and a few drops of croton oil suspended in thin mucilage, was given about ten o'clock, and this had the effect of removing, about two hours afterwards, a large quantity of very offensive matter. The pupils continued to be widely dilated; at times the heart would beat violently, and the eyes become suffused; but these bad symptoms were always kept in check, by the timely and judicious exhibition of small doses of tartar emetic, repeated as often as the pulse indicated an increased circulation; the hair had, of course, been removed.

The young man remained completely insensible for four days; and it was not until the evening of the fourth day that he became at all conscious.

I cannot speak too highly of the value of tartar emetic, and of its powers in such cases as an antipholgistic and sedative. I desire that this case should be placed in record to prove this; and also because it exhibited many points of interest, which, although, they can now be only cursorily referred to, reight have been dwelt on at the time, when all was fresh in

the memory, with profit. In Jamaica,—and more especially in the country parts, where one has so much saddle-work, so many wearisome rides, through mountain passes, and under such a burning sun—it is impossible to sit down and write after the fatigue of the day is over; much of great intere t to the profession might be recorded otherwise; and one sometimes regrets that he has neither the time nor the inclination to place on record what he sees and observes.

I have thus diverged a little from the subject, in order to explain why I am compelled to trust, principally, to memory for the details in this case. But to return to the facts:—I found that small doses of tartar emetic, combined with henbane and digitalis, given frequently, calmed the pulse and warded off many paroxysms of convulsive excitement—so to speak. Of course other items of treatment, viz: a blister applied to the back of the neck and head; mercurial dressings to the blistered surface, and mercury and opium given so as to touch the gums; all combined to check and ward off inflammation, and to effect a permanent curc. I wish, however, to speak particularly of the value of tartar emetic in this case, as I found it, and as it impressed itself on my memory at the time. Each apparently approaching fit, as indicated by redness of the face and conjunctiva, fulness of pulse, and jumping carotids, with muscular twitchings, &c., was immediately subdued by the tartar emetic, combined, as it was, with henbane and digitalis.

Strange to say, in this case, when consciousness returned, after a lapse of four days, this young man was a maniae; he had all sorts of fancies, and was at times very much excited; when paper was given to him for cleansing purposes (I will be understood when I so express myself), he would fancy, and insist, that it was all stuck over with pins, and he would pull out the imaginary pins and count them into a hand, or on the table, up to any number; he had lost the memory of names, but not of numbers; and he would wander about the house, and climb up and examine the top of the wardrobe, which his excited imagination would picture as something else. This maniacal excitement, too, was kept in check—and completely so—by tartar emetic, frequently administered; and, from the good effects thus, at all times, made apparent, I was able to assure the the boy's sorrowing friends that this excitement would pass over, and that reason would be left intact, after the lapse of a few days; and so it was.

Five years have since elapsed, and my patient of that time is now a thriving planter, and a clever young man.—Dublin Quarterly Journal of Medical Science.

#### PURPURA HÆMORRHAGICA IN CHILDREN.

Two Cases, with Remarks. By G. Stevenson Smith, R. S.C. E., formerly Resident Medical Officer, Royal Edinburgh Hospital for Sick Children.

Purpura is an affection of frequent occurrence in youth, and is most commonly met with in children whose general health has been deteriorated either by protracted illness or by insufficient supply of pure air and proper food. It does occasionally show itself, however, in an acute form, coming suddenly in a child who had previously enjoyed good health; and sometimes it manifests itself in the course of an acute disease, as in fever. During the past year we have observed it in its simplest form in a little girl who was under treatment for phthisis; and another patient aged eight, who was suffering from typhoid fever, numerous purpura spots made their appearance on the belly a day or two after a sharp attack of hæmorrhage from the bowels. It is usual, in medical works, to draw a distinction between purpura and scurvy, and the practioner is warned from mistaking the one for the other. In the treatment of such cases a combination of tonic and anti-scorbutic remedies is productive of the most beneficial results. The following case will illustrate the truth of these remarks:

CASE I.—E. A., aged seven, was admitted to the Children's Hospital on the 4th of October, 1865, on the recommendation of Dr. Andrew Inglis. She had been falling off in health for some time, and a few days before admission had bled freely from the nose and mouth. On admission, her face was of a dingy green color, which contrasted strangely with the bright, pearly hue of the conjunctiva. The lips, gums and tongue were swollen and covered with a coating of black coagulated blood. The tunid gums bled on the slightest touch. Bloody saliva trickled away almost constantly from the mouth, and the teeth were incrusted with dark colored coagula. On the face, trunk, arms and legs were numerous variously tinted purpura spots, of rounded and oval form, which did not disappear on pressure. Some of them were of a dark claret color, some of a brighter purple hue, others of a dirty yellowish green appearance.

The pulse was rapid and feeble, and the child lay in a half sleeping prostrated condition. Nothing abnormal could be detected in the chest or abdomen. The urine was as dark as coffee, and deposited a thick, dark-brown sediment when allowed to stand a short time. On boiling it, a curdy albuminous deposit was produced, which occupied about three-fourths of the bulk of the urine in the test-tube. A microscopic examination showed that the urine was loaded with bloood-corpuscles, and a few membranous scales stained with hæmatin were also seen.

A mixture of chlorate of potash and tincture of the muriate of iron, four grains of the formre, and eight drops of the latter, was directed to

be given every three hours. A gargle of chlorinated soda was to be used for washing the mouth, and strong beef-tea with a desert-spoonful of sherry to be given frequently; she was also to take lemon-juice.

After two days' treatment there was a most marked improvement in the condition of the patient; the mouth was cleaning, and the urine was more natural. By the 8th, the patient was lively, and sitting up in bed, and the urine, though still containing blood-cells, was quite clear. After the 11th, no fresh spots appeared; the bleeding from the gums ceased, and she was out of bed and walking about the ward. The tincture of the muriate was continued in ten-drop doses thrice a day. She improved in strength daily, and was dismissed on the 28th of October.

In the next case the disease was more chronic; there were no scorbutic symptoms, no sponginess of the gums or bleeding from them; but there was hæmorrhage both from the stomach and bowels. But notwithstanding a great improvement in her general health and strength, fresh crops of purpura spots continued to show themselves for weeks, at intervals of four or five days.

CASE II.—J. T., a pale, unhealthy-looking girl, aged 11, was admitted to the Children's Hospital on the 27th of March, 1865. She belonged to an unhealthy family, and had been in poor health for some months. A brother of hers was admitted about the same time, suffering from well-marked rickets and general debility. Of late this girl had frequently vomited, and passed from the bowels dark colored blood in considerable quantity. Her feet and legs, too, had been ædematous, and she had for some time had pain across the stomach.

When admitted the legs were mottled with purple-colored spots, and there were a few on the arms also. Pulse weak; gums pale, but firm and sound. The urine was dark in color, albuminous, and contained blood-corpuscles.

The tincture of the muriate of iron was prescribed, eight drops to be taken thrice a-day, and she was to have a nourishing diet. By the 6th, of April she was much improved in health and spirits, but fresh crops of spots continued to show themselves every now-and-then on the feet and legs. Dark spots were also observed on the roof of the mouth, and all over the surface of the soft palate. No blood was passed from the stomach or bowels, however. She got quite well in her general health, took her food with relish, and complained of nothing; but up to the day of her dismissal, the 17th of May, successive crops of dark red spots continued to show themselves at intervals, and her urine still contained traces of albumen. She was recommended to continue the iron in increased doses.—Edinburgh Medical Journal.

## Midwifery and Diseases of Momen and Children.

#### IODINE IN THE TREATMENT OF UTERINE LEUCORRHEA.

The treatment of leucorrhoea is a constant subject of difficulty and vexation to the medical practitioner. Although the use of various astringents will often effect improvement, yet this is seldom lasting, and the recurrence of the symptoms is a continual source of annovance. We have lately observed a plan which is being pursued by Dr. Murray at the Great Northern Hospital, and which promises to be a very useful addition to our means of treatment in this very troublesome condition. Dr. Murray first ascertains, by means of the speculum, that the discharge proceeds from within the uterus. He then introduces a small, short-haired brush (much like that used for washing phials) by a screw-like motion, so that the thick phlegm-like layer on the uterine wall is swept off with every turn of the brush. When this reaches the fundus he steadily withdraws it, charged as it is with the mucous deposit. Its place is then taken by a gum-elastic catheter with several apertures, through which is injected a lotion consisting of one part of the compound tincture of iodine to two parts of water. The uterine wall is thoroughly washed with this. The muscular contraction which follows this injection is remarkable, the tube being tightly grasped, so that its re-introduction at the time is extremely difficult. Dr. Murray has reason, after an experience of many cases treated by this plan, to feel highly satisfied with its success.

In this connection the use of iodized cotton, suggested by Dr. Robert Greenhalgh, as an application to the cervix uteri in chronic inflammatory enlargements and thickenings, and in subinvolution, with or without congestion or induration of tissue, is of interest. It is prepared as follows; Two ounces of iodide of potassium and one ounce of iodine are dissolved in eight ounces of glycerine, in which solution eight ounces of cotton wool are thoroughly saturated and then carefully dried. It should be applied through a speculum directly to the cervix uteri, using the precaution of securing it properly by a silk thread, and should be kept in position in the vagina for from twenty-four to forty-eight hours. Dr. Greenhalgh claims for it the following advantages: It is light, clean and portable; produces no irritation, destroys all fector; is considerably stronger than the compound tincture of iodine; is more readily absorbed, and can be kept for a longer time in contact with the diseased tissues; and, moreover, it does not soil the linen like many of the suppositories and medicated appliances in use for uterine affections - Lancet, Jan. 6, 1867.

#### DUBLIN OBSTETRICAL SOCIETY.

DR. SAYER, President.

On Rigid Perineum. By Dr. Beatty.

The management of the last part of the second stage of labor is often attended with difficulties that demand the utmost care, and are productive of serious anxieties in the mind of the individual charged with the conduct of the case. This remark applies more particularly to the phenomena of parturition in primipara; though at times circumstances of a similar nature are found to create embarrassment in those who have already borne a child at the full period.

already borne a child at the full period.

All persons who have been any time engaged in the practice of midwifery are well acquainted with the tantalysing torments of a rigid perineum. Hour after hour the attendant sits by the bedside; every pain distending the soft parts seems destined to be the last; the structures, strained to the utmost, seem incapable of further resistance, yet they do resist, until finally a rent at the fourchette takes place, most commonly to a small extent, sometimes to a more considerable one, and the head of the child escapes from the pelvis. In many cases of moderate rigidity, the delivery is accomplished without any rent; but in the more obstinate cases, the greatest amount of care, exercised by the most skilful hand, will fail to prevent some amount of laceration. A knowledge of this fact should lead us to be very cautious in dealing with the reputation of the attendant who has the misfortune of having such a case under his charge. Every man in practice is likely to encounter such cases, and charge. Every man in practice is likely to encounter such cases, and in some of them no man can prevent the accident. In speaking of this subject, Dr. Denman makes the following remarks: "That some degrees of laceration should sometimes occur will not be surprising, if we consider the great change and violence which all those parts sustain at the time when the head of the child is passing through them, or that when a laceration begins it should extend through a part rendered at that a laceration begins it should extend through a part rendered at that time extremely thin, and suffering an equal degree of force. When the perineum is indisposed to distend or if when distended it cannot permit the head of the child to pass with facility, the anterior part of the rectum is dragged out, and gives to the perineum a temporary elongation. The true perineum, and the temporary, as it may be called, thus forming an equal uninterrupted space; if a laceration should commence at any part it might, with the greatest care, extend through the whole.

"That kind of laceration of the perineum which commences at the anterior edge, and runs obliquely or directly backwards, is alluded to in every dissertation on this subject. But there have been many instances

of another kind of laceration, which may be called a bursting or perforation of the perineum at that part which is connected with the circumference of the anus, when the anterior part is preserved, and through such perforation, it is said, children have sometimes been expelled."

A remarkable case of this kind occurred in the practice of the late Dr. Beatty, in the year 1808, from whose case book I now quote: "October 17th, 1808.—I saw this patient in labor with her first child, about seven o'clock in the evening, after having had slight pains during the day with very little effect on the os uteri. I saw her again  $10\frac{1}{2}$  p.m., when the progress of labor appeared to be slow. While I remained with her the pains became more frequent, and in a very short time the head rested on the perineum; but what appeared strange to me was, that though the pains continued to be very severe, and the tumor caused by the head distending the perineum to increase, there was not the slightest dilation of the os externum beyond its original size. In about an hour the head of the child was entirely expelled from the bony pelvis, and the external parts formed a bag or cap for it, which was forcibly distended at every pain. My fears of a laceration now increased so much that I thought it necessary to explain them to an intelligent woman who was with us, and to make her examine the parts, that she might be convinced of the impossibility of preventing it, at the same time I used lubricants to satisfy the friends that I would do everything in my power for my patient. At length I found the perineum begin to chip or crack at the prominent part, and soon after give away to such an extent that the child was passed through the aperture, though it did not communicate with the os externum. The placenta was delivered through the same passage; and when I told the lady that she had had the most painful labor I had ever met with, she said she expected such, from a contraction which had taken place in those parts when she was young, after a fever, a contraction which had almost prohibited coition.

"The os externum had left an oval mark on the child's head, which I measured, and found to be  $2\frac{1}{2}$  by  $1\frac{3}{4}$  inches, and which was the full extent to which the vulva would yield.

"October 28th.—This day examined the state of the parts, and found both the sphincters of the vagina and anus entire and undisturbed, and the rectum uninjured. The patient was able to walk a little through her room. The wound was in a healthy state, and likely to heal."

But such an accident as this is not the worst that occurs under similar circumstances. A more frequent result is the extension of the rent, commencing in the middle and most prominent part of the distended perineum, and its prolongation through the sphincter ani behind, and

the vulva before, thus throwing the two passages into one, and entailing the misery of uncontrolled defecation upon the unfortunate patient.

As I have already said, no amount of the most careful attention on the part of the medical attendant can prevent some of these extensive lacerations at times. The split will begin either in front, and run back to the anus or into it; or it may begin in the middle and embrace both sphincters before it stops; or the head may come through the rent in the middle, and leave both sphincters untorn. In whichever of these ways the struggle terminates the result is very calamitous, and entails a vast amount of suffering on the patient and of trouble to the attendant in whose hands the accident has occurred, to whom the patient and her friends will attribute all the blame. These cases are, in the present day. not so lamentable as they were formerly, for plastic surgery and wire sutures enable us now to remedy the evils in a manner that would astonish our forefathers. I look back with regret to the case of a most interesting, very handsome patient, twenty-five years of age, the wife of a cavalry officer, who passed through my hands thirty years ago. I was engaged to attend her with her second child, and when her labor began I was surprised to find the perineum split into the rectum. I learned that this happened in her first confinement, which took place before she came to this country, and, as usual, the strongest invectives were heaped upon the head of the unfortunate doctor who had attended her. Her second labor, I need not say, was easy enough, and I saw her for a long time after her recovery. But her life was miserable; she could not venture into society, for she was unable to control the passage of feces or flatus from the bowels, and she never knew when one or other would escape. If I then knew and could have done what I now know and can do. I would have been able to restore that young creature to health and comfort, and to that position in society she was intended to adorn. I think it is extremely probable that cases like this are more numerous than is generally believed. Until very recently it was too well known that nothing could be done to relieve them, and unfortunate sufferers bore their misery in silence, not wishing, naturally enough, to make known their infirmity when of such a disgusting and incurable nature. Since the means of remedying the evil have been devised and success. fully practiced, the number of cases that seek relief has been wonderfully increased; and in the last edition of Mr. Baker Brown's work on the surgical diseases of women, he gives the details of no less than 112 cases in which he has operated. When such a vast number has fallen to the lot of one surgeon, we may have some idea of the multitude that must be scattered over the empire.

Seeing, then, that extensive laceration of the perineum is of sufficiently frequent occurrence to arrest the attention; and knowing, as we do, that at times the most skilful care, as at present practiced, is impotent to avert the calamity, it behooves us to enquire more particularly into the nature of the cases, and ascertain the cause of the accident, with the view of discovering some means of preventing it, more effectual than those in ordinary use. When we look back on our own experience, and read accounts of such cases in authors who have treated the subject, we find that the conditions of the parts for some time preceeding the rupture is as follows: The head of the child has escaped from all bony resistance, and is well out of the pelvis, carrying the perineum and anterior wall of the rectum before it, these parts forming a cap or bag in which the head lies. The vulva, however, remains undilated, the efforts of the uterus seem unavailing to cause any extension of that opening, and the head, which in the earlier stage of this part of the process had been driven against it, has now, by the yielding of the perineum, sunk below its level; and every pain drives it lower, so that all the force is expended in an endeavor to tear through the bag in which the head is embraced. The soft parts finally give way, often in the middle, the most prominent part, and the rupture is effected. The term rigid perineum is, in fact, hardly applicable to these cases; it is the vulva that is rigid, and its resistance that causes the mischief. It is unvielding of the vulva that is the immediate cause of the danger.

Let us now turn to nature's book, and enquire what means she adopts to escape from the difficulty in cases somewhat less exaggerated than those I have just described. In minor degrees of rigid vulva the head is enabled to take a more forward course, a greater amount of it is permitted to emerge at each pain, but the tissues will not or cannot yield sufficiently to permit the head to pass through; the opening must be enlarged before delivery takes place, and accordingly in a vast number of such cases, it is notorious that some fibres of the fourchette give way, and immediately the head is expelled. A great deal may be done by supporting the perineum to prevent this rent going too far, but no amount of care will prevent some laceration in many of these cases. Nature I believe to be a very good doctor, and often accomplishes her ends better than the best of us, and moreover, often points out to us the right way to help her out of difficulties, if we study her proceedings, and are not too proud or too timid to imitate her.

The following case will show what can be done by taking nature as a guide:

On the 14th day of November, 1866, a remarkably fine, well made

lady, twenty-five years of age, and just nine months married, took labor at two o'clock a. m. I was sent for, and saw her at eight o'clock a. m.; at which time the head of the child was well down through the pelvis and nearly rested on the perineum. The head was covered by the still undilated uterus, the os uteri being the size of a two shilling piece. The vulva was very small, but did not seem rigid. The pains were natural. the os slowly dilated under their influence, and in another hour, at nine a. m., it was fully open, and the head distended the perineum at every pain. I looked forward to a speedy delivery, and took my place by the bedside. The head came lower and lower, pushing the distended perineum before it, and at each pain a small portion of a very hairy scalp was protruded through the vulva. In this position I remained from 9 a. m. to 2 p. m., just five hours, during which time the pains were increasing and more violent, distending the perineum to a frightful extent. I wished to give her chloroform, but she refused to have it. The perineum seemed like a bag into which the head was driven with every intention to tear through it. The soft parts over the head from the edge of the anus to the fourchette, measured nearly 31 inches; the anus was distended at every pain, showing fully an inch and a half of the interior of the rectum. During the whole of this time there was no further dilation of the vulva, and no advance of the head forward; the whole force of the uterus seemed to be directed towards driving the head either through the perineum or through the rectum. It became quite manifest that one or other of these must occur, for there did not appear to be the least chance of the head escaping through the vulva. When matters were in this state at the end of five hours' most desperate struggle, I argued with myself, that if nature so often puts an end to such difficulty by the yielding of the fourchette and anterior fibres of the perineum. the best way to rescue my patient from the frightful laceration that was so impending would be to imitate nature, and enlarge the opening of the vulva. Accordingly, seizing the moment when a furious pain, that almost drove the head through everything, had subsided, I introduced one blade of a probe-pointed scissors between the perineum and the head. and divided an inch of the soft parts. The very next pain passed the head out through the vulva with the greatest ease, without a single fibre being torn, or the slightest extension of the opening I had made. The recovery was perfect. No treatment beyond ordinary washing was adopted for the wound, which healed spontaneously, so that the nurse in attendance remarked to me some days after, that I ought to have taken measures to prevent its healing so well, for there would be the same trouble at her next labor. By this simple imitation of what nature so

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often does I terminated a most difficult and perilous labor without the slightest ill result to the patient. I find, in two recent authors, allusions to an operation similar to that which I have just described. Dr. Hall Davis, in his very excellent work,\* says: "In organic or structural rigidities due to hard cicatrices from former sloughings, sometimes depending upon plastic operations extended too far forward to admit of the exit of the head, these means (chloroform, warm fomentations, unctuous applications, and warm water enemata) may fail. In two cases last year under my care, such cicatrices were the obstacles, and not yielding to chloroform, in one a rent was inevitable, which, however, left an adequate perineum behind. In the other case, rupture being expected every moment, I summoned the surgeon who had operated, and suggested his making a slight bilateral incision downward, and outward to the extent of a quarter of an inch. This sufficed, and the child, living. immediately passed out without any extension of the incision, which healed in two days afterward; thus the perineum was saved." In the last edition of the highly valuable work of Mr. Baker Brown, the observes; "In cases where rupture seems inevitable during delivery, Dr. Blundell recommended and practised the plan of relieving the tension of the perineum by slight lateral or oblique incision during a pain, thus actually producing a laceration, but one of no moment, if it serve as intended, to prevent the tear along the meridian line, where it naturally takes place, and proves of serious consequence. This plan I concur with, and would practice when chloroform failed or could not be administered. MM. Paul Dubois and Chailly-Honore advocate an oblique incision of the vulva toward the perineum about the third of an inch long. either to prevent altogether the rupture of that region when much distended, or when the laceration is unavoidable, to favor it at a spot where it may produce the least mischief. The writers support their views by the history of successful cases." Since reading the above quotation I have searched through Dr. Blundell's work, and not finding any allusions to the operation in question, I inquired from Mr. Baker Brown. and he has kindly informed me that he attended Dr. Blundell's lectures. and heard him advocate the proceeding.

I am quite sure that none of the members of the society will imagine that I undervalue the well known means so advantageously employed to induce relaxation of the perineum and vulva, such as bleeding, antimony, chloroform, warm fomentations, and lubricants, or the protection

<sup>\*</sup> Parturition and its Difficulties .- p. 13. 1865.

<sup>†</sup> Surgical Diseases of Women .- p. 10. 1866.

to be obtained by careful support of the perineum; my object of this communication is to impress upon them, that in extreme cases, such as I have described, after all ordinary means have failed, and frightful injury is impending, a simple operation in imitation of what nature does will avert the danger, and place the patient and her offspring in safety.—12th January, 1867.

# ON THE MANAGEMENT OF WEAK NEW-BORN INFANTS. By Professor Depaul.

Professor Depaul remarks that while abundant attention is given in obstetric treatises to the treatment of healthy new-born infants, and those who are seemingly still-born, little space is devoted to the care of weakly. This want he endeavors in part to supply. He thinks that authors have not laid sufficient stress on certain deceptive appearances, which seem to imply that the infant is out of danger because it takes the breast, and seems to suck.

The fact is, however, one of very common occurrence; the infant apparently sucks, but does not increase in weight, and after a time discontinues its fruitless efforts, screams more frequent, and wastes away. In order to discover whether suction is efficiently performed, the child should at the time he appears to be taking the breast with most vigor, be removed from its nurse, and the presence or absence of milk in its mouth be ascertained. The paid nurses at the hospital are required every day to make this experiment. Mr. Depaul also endeavors by all means to rouse from their indolence the wet-nurses to whom puny, delicate infants have been intrusted, when the nursling takes the breast but imperfectly, Under these circumstances, it often happens that the infant has not strength to suck, and the finest nurses are provided in vain. The best nurse in such cases, is not the woman who has the largest supply of milk, but one whose milk flows easily, and drops without effort into the child's mouth. If a nurse of this kind cannot be procured, milk of good quality should be obtained, and given mixed with thin gruel. Mr. Depaul agrees with Professor Scanzoni, that ass's milk is the best for the purpose; but in most cases the practitioner must be satisfied with cow's milk. Every hour or two, day and night, from one to three teaspoonfuls of diluted milk should be administrated. Should this kind of food give rise to colic, Scanzoni recommends the addition of a little fennel or dill water; and as soon as the child has gained in strength, it is proper to procure for it a good wetnurse; and this should not be too long delayed, lest the habit of receiving nutriment into its mouth without any effort, may prevent the infant ever

taking the breast again, a circumstance which occurred in the case of a young prince, at present living in exile; the nurse should then be instructed to draw her own milk with an exhausting glass; but this can seldom be obtained from a mercenary nurse, and scarcely ever succeeds but with mothers who rear their own children.

It should further be remarked, that in primiparæ the nipple is often so large or so hard, that if the child is not very strong, its efforts at suction are unavailing. The mother is then in fault, and it is therefore highly expedient to ascertain the condition of the breast in gravid women, in order to form an opinion as to the possibility of their nursing.

It is absolutely necessary, in addition to the measures calculated to restore and increase the strength of the infant, carefully to shield it from the influence of cold, and to adopt every precaution to preserve the temperature of the body at the physiological standard. Warmth is for infants, especially for new-born infants, the indispensable condition of the continuance of life. None but the strongest children can bear any loss of temperature. The weak invariably perish if exposed to cold; and Hunter sagaciously noted the fact, and strongly objected to the practice prevalent in his day of bathing very young children in cold water for the alleged purpose of invigorating their constitution. When, therefore, a child is prematurely born, or naturally weak, it should be carefully enveloped in warm clothing, kept in a comfortable bed and guarded in every possible manner from adverse atmospherical influences. The thermometer should be daily consulted, and hot water bottles used, if necessary, to maintain the heat of the body at a proper height.

By means of these precautions, and, if required, by the exhibition of aromatic and stimulating remedies, Mr. Depaul has had the good fortune of restoring in the course of two or three weeks, children supposed not to be viable, to a normal state of development. Untiring supervision is always indispensable, as any neglect of these all-important points may entail irremediably fatal consequences.—Half-Yearly Abstract.

#### SORE OR EXCORIATED NIPPLES.

BY DANIEL V. FOLTS, M. D.

"When fevers burn, or ague feezes,
Rheumatics gnaw, or colic squeezes,
Our neighbors' sympathy may ease us
Wi' pitying moan;
But thee—thou hell o'a' diseases,
Ay mocks our groan."

If an aching tooth could thus arouse the Scottish bard to the utterance, if not of "thoughts that breathe," at least of "words that burn," I was wondering the other day, when his natal anniversary was being celebrated, what he would have said of the agony of nursing with sore nipples, especially had he been a mater, instead of a pater-familias! Perhaps no other disease apparently so trifling, and never fatal, has caused a tithe of the sufferings in the lying-in chamber that this has. For centuries the profession has been devising means for its cure. On the shelves of every physician's library are found volumes containing long lists of remedies for this affection. The mineral, the vegetable and animal kingdoms have all been laid under contribution. The salts of silver. of copper, of lead, of zinc and mercury, as well as those of alumina and potassa, have had their advocates. Time would fail to speak of all the washes and lotions-narcotics, emolliments and astringents-to say nothing of the unguents, plasters and fomentations that have been employed. And yet so common is this complaint that a distinguished professor in one of our large universities writes, "I am surprised when I hear one of my patients say that she does not suffer from it." It, however, affords me pleasure to be able to put it on record that my experience differs from that of the professor-for a large majority of my lying-in patients, in a practice extending over more than a quarter of a century, have been free from this source of suffering. And yet but too often have I been compelled to witness the terrible struggle between bodily pain and maternal affection, when the infant called for its natural food and the mother was attempting to supply it. When the attention of the surgeon was first called to the value of collodion in closing incised wounds and healing abraded surfaces, I thought surely, now we have it! But after having brushed over many an excoriated nipple, thereby adding suffering to misery by the smarting caused by the ether in the compound used, I was compelled to abandon it. For, aside from the pain caused by its application. I found that the artificial cuticle formed was as worthless as the narrow strips of adhesive plaster recommended by Dr. Physick, the power of the orginal infant pump being usually sufficient in one application to disarrange the whole arrangement. At one time, in common with others of the profession in this city, I had some confidence in "Parker's oil and ventilating nipple shield." In some cases, indeed, it answered a good purpose, but in more it utterly failed, so that of late I have ceased to recommend it. It has always been my opinion that, to cure a sore nipple, absolute rest of the part was as necessary as to heal an incised wound; and generally, I think, we shall find, as Dr. Gooch has it, that "we are rowing against the stream so long as the cause, viz., the action of the child's mouth in sucking, is renewed at short intervals." To succeed, then, the chapped or excoriated surface should be protected from the friction of the infant's

tongue and gums; and this not for a few hours, or days even, but until it is healed and covered by sound integument. To fulfil this indication and not wean the child, has hitherto been a task difficult to accomplish. The various shields of wood, metal and glass, with all manner of teats attached, have been called into requisition; and besides those found in the shops, I have had others constructed by skilful mechanics. With these I have sometimes succeeded, but more generally the matter has ended in mortification to myself and disappointment to my \* \* \* TDr. Folts then speaks patient. of certain other nipple shields which he had found possessed of much merit, but gives the preference to the one described in this articles.] It remained for Mr. Kent, a well-known apothecary of this city, in his "Metalic Nipple Shield and Caoutchoue Teat," to supply this long-felt need. This is the only artificial nipple that I have ever used with unvarying success, and so admirably does it answer the purpose that the worst cases of sore nipples have entirely recovered without any local application whatever to the excoriated surface, beyond cleansing the parts and wiping them dry when the shield was removed. Glycerin unguent or some other emollient application, might, in some cases, be advisable to soften the skin and promote granulation. Mothers who had suffered untold agony in nursing, and had resorted to all other means in vain, have been at once relieved by this simple appliance. The valvular arrangement is so simple that it is almost impossible for it to get out of order, and yet so efficient that a few inspirations of the child cause it to adhere so firmly that nursing proceeds much as if no artificial medium were interposed. What the infant thinks of the arrrangement, we shall not, perhaps, at present be informed; but the mother says, "blessings on the head of the man who invented it!" I will only add, for the benefit of those who may be so unfortunate as to need this mechanical substitute. and for the information of the profession at large, that T. Metcalf & Co., 39 Tremont St., are the general agents for its sale .- Boston Med. and Surg Journal, March 14, 1867.

#### PROLAPSE OF FUNIS.

Read before the Norfolk (Mass.) District Medical Society, July 10th, I867, by Charles E. Stedman, M.D., of Dorchester.

At half past twelve in morning of June 19th, I was called to Mrs. C. D., a thick set little woman, 22 years old, in labor for twelve hours with her first child. On examination, the forefinger just reached the head which was high up, and something presented within the unbroken

membranes. The os being well dilated, the waters were evacuated, and the bunch in advance of the head proved to be, as conjectured, the entire cord, pulsating and rolled up into a tight ball of the size of the fist; the head was in the first position. The patient was requested to take her position on the cloows and knees, which she readily did when the necessity for the posture was explained. After carrying the right hand into the vagina, I succeeded, by a little manipulation, in returning the whole cord behind the ear of the fœtus. The hand was kept on the aperture where the cord had disappeared till two slight pains had occurred, and after twenty minutes the woman was released from the constrained posture, and allowed to come over on her left side. There being no further appearance of the cord, and the pains being feeble and slow, she was allowed to leave the bed and walk about the room. In two or three hours the contractions of the womb grew vigorous, and after a very hard labor she was delivered at one o'clock of a large, live boy.

It may be unnecessary to state that this treatment of prolapse of the funis is the "postural treatment" of Dr. T. Gaillard Thomas, and has already given a large proportion of successful cases: if there have been any failures, I have not seen them reported, though several favorable results have been detailed in the journals.

Dr. Churchill says that more than one half the children are lost in cases of prolapse of the cord. If the accident is so fatal, the profession owes much to Dr. Thomas for pointing out so simple a remedy as the taxis combined with such a posture of the patient as will allow the weight and slippery nature of the funis to rectify the presentation. Version, unless performed immediately after the rupture of the membranes, is generally fatal to the child and is not always safe for the mother, while the operator's trouble is thrown away if the child is not born rapidly. Late writers mention Dr. Thomas's practice, but do not give him all the credit he seems to deserve. Dr. Bedford says in a foot-note that he "should not omit to mention an ingenious plan suggested by Dr. T. Gaillard Thomas for the reposition of the cord." Dr. Hodge says, "it may be well to follow the suggestion of Dr. Thomas.... this probably is an effectual method . . . . should it fail, some of the numerous expedients which have been proposed may be adopted."

Dr. Bedford says further:—"I have very little confidence in any of these contrivances. They may sometimes succeed in dexterous hands, but very frequently they fail... It is amusing to hear the facility with which the reposition of the funis can be effected. But, gentlemen, it is one thing to talk and quite another to act."

My friend, Dr. W. C. B. Fifield, tells me that in two cases of prolapsed

funis, after unsuccessful attempts to replace it, he had performed version and delivered dead children. Not long ago he was called to a case where a midwife was in charge: he found a soft and dilated os, through which the cord depended, pulsating. Placing the patient on her elbows and knees he carried the cord above the presenting head by his hand introduced into the vagina, administered ergot, and kept the funis back with his hand till the head plugged the brim of the pelvis. The child, though born with little pulsation, responded to treatment in half an hour, rewarding the Doctor's exertions by a gasp, and is now living.

It is to be borne in mind that a position on the hands and knees does not give slant enough to the plane, which must be inclined as much as possible by the patient's resting on her elbows or even shoulders, while if needful a pillow may be placed under her knees, to elevate the hips: and I have heard of a woman's shoulders reposing on a chair while her knees remained on the bed.

If this method requires little dexterity in its execution, and is successful in cases where the doctor is called before the head is jammed into the lower strait, it is no small gain on the old practice of fishing for the cord, and trying to poke it back with whalebones, and tapes, and bags, and wreathing it in graceful festoons about the limbs of the fœtus.—

Boston Medical and Surgical Journal, July 1867.

# A CASE OF UTERINE PREGNANCY OF MORE THAN FIVE YEARS DURATION.

By Dr. T. B. Cox, Frankfort, Indiana.

Mrs. A.—Married at about eighteen years of age, was seized with convulsions on the 30th October, 1861. She was then, as she supposed, in the seventh month of utero-gestation. She had more than forty convulsions; two or three physicians were in attendance; she was bled, and the convulsions ceased—whether in consequence of the bleeding or not, deponent will not say. No uterine pain or contractions occurred at this time. A few days subsequently she had pains which were supposed to indicate commencing labor. A physician was sent for. He administered an anodyne, and she passed along without anything unusual occurring until the 17th day of November, when, just eighteen days from the first of the attacks of convulsions, uterine pains recurred. Dr. W. P. Dunn visited her; believed her in labor; made a digital examination; thought that he felt some part of the fœtus presenting, but does not now remember the presentation. The pains seeming of an irregular character, he gave an

opiate and retired, expecting, however, to be called up before morning, as this visit was made early in the evening; but, to his astonishment, when morning came the patient was quite free from pain.

A few days subsequently there was a free secretion of milk, which continued several days, and was with difficulty arrested.

For a month or six weeks the catamenia appeared, and occurred regularly for nearly four years; then free hemorrhage, which lasted several days, the patient passing large clots of blood. The hemorrhage gradually ceased, nor was there, after this, any discharge from the vagina, nor any vicarious menstruation.

I first saw the patient on the 10th day of May, 1867; found a large pyriform abdominal tumor occupying the median line, perhaps a little more prominent upon the left side, and extending an inch and a half above the umbilicus; it seemed solid and of but slight mobility.

The patient was apparently laboring under an attack of peritonitis; there was intense soreness over the entire abdomen, fever, red tongue, occasionally profuse perspiration, etc. But under the influence of opiates, hot fomentations, and subsequently tonics and nutritious diet, she rallied and was able to be up most of the time.

Subsequently she had chills, fever and sweating, and the tumor appeared to point on the right side, about two inches and a half lower than the umbilicus, and about the same distance from the median line.

After having become fully satisfied of the adhesion of the peritoneum to the abdominal walls, and there seeming to be fluctuation in the enlargement, an exploring needle was introduced, and an offensive liquid and gas escaped by the groove of the instrument. The patient being at this time very weak—indeed, extremely prostrated—and averse to any further surgical interference, it was deemed best to relinquish all attempts at further investigation until she should again rally. She was ordered stimulants in increased doses, anodynes, tonics and nourishing diet; in short, a general supporting treatment.

Under this course the patient improved somewhat in strength. Soon the tumor again become more prominent, and increased in size. It was now cut into with a sharp bistoury, an incision of three-fourths of an inch being made; a considerable portion of gas and very thick, offensive fluid, so very offensive that one could scarcely stay in the room, were discharged. From this time there was a continual discharge until the patient's death, which occurred on the 4th of August, some four or five weeks subsequent to the time when the puncture was made. The patient was so very feeble—indeed, only living, as it were, from day to day, and was so unwilling to have the opening in the abdomen enlarged sufficiently to enable

us to ascertain what was the true condition, that we were still, to some extent, feeling our way in the dark. Of this much we were certain, that there was a feetus in a decomposed state. But whether the pregnancy was intra or extra-uterine, was something of a question. Dr. Dunn who had been with the woman in her first sickness, as previously stated, was quite confident that it was true pregnancy.

Post Mortem, twelve hours after death, was made by me, assisted by Drs. Dunn, Douglass and Brown. An incision was made from the ensiform cartilage to the os pubes. Intestines healthy, with the exception of peritoneal adhesions. The uterus partially adherent to the abdominal walls; its fundus had been destroyed by ulceration, and yet the adhesions were so perfect that none of the uterine contents had escape into the peritoneal cavity. Part of the body and of the neck of the womb was healthy; the rest of the neck was enlarged, elongated, and felt rather flabby. Just above the neck the walls of the womb had adhered, and were perfectly united to the extent of three-fourths of an inch,—the adhesion so thorough that it could not be broken up. The remains of the fœtus were found lying in this ulcerated cavity, and the head seemed to be in the left iliac region. The flesh had nearly all sloughed off the bones, and as a natural result, the tumor had gradually decreased for some time previous to the death of the patient.

Such is a brief and very imperfect history of the case in point of details, but substantially true in reference to facts, as learned from her friends, from the patient herself, and from the physicians who were in attendance upon her during her first sickness.

Many physicians saw and examined this woman during the long interval that elapsed between her first illness and her death, and not one of them was fully satisfied as to her true condition. Some were inclined to the opinion that the tumor was ovarian, while others thought it extrauterine or abdominal pregnancy. The case was perplexing to me. It had then been over five years since the woman had been supposed to be pregnant.—Western Journal of Medicine, Indianapolis, Ind.

### LABOUR TERMINATING IN EXPULSION OF HYDATIDS.

By EDWARD CROSSMAN, Esq., Hambrook.

The case I wish to report is by no means unique, but has, I think characters of practical interest sufficient to warrant a brief record. It is a case of pregnancy and labour at full time, terminating in the expulsion of a large mass of spurious hydatids.

My patient, aged 28, the wife of a well-to-do farmer, in October 1865 bore a healthy child, which she suckled till the following July. In August she menstruated, and then became pregnant again. The usual symptoms of pregnancy were present, and all went well with her till January of this year, when a slight hæmorrhage commenced, and, notwithstanding appropriate treatment, persisted for more than a month. From the middle of February till the middle of April, she was pretty well. Occasionally a slight sign appeared, but not enough to call for more than a few hours' rest upon the sofa. She felt the movements of the child, frequent, but very weak. Her arrangements were accordingly made for lying in during the month of May.

On April 20th, while spending the evening from home, she experienced a sudden and severe hæmorrhage, with slight uterine pains. The pains subsided, but the hæmorrhage continued more or less until the morning of the 3rd of May, when active labour appeared to be coming on, and a message was sent to me to hold myself disengaged.

Six hours later, I was summoned. The pains had steadily increased, accompanied by considerable but not alarming hæmorrhage; and, just before my arrival, two large masses of an hydatidform growth, together filling a chamber-pot, had been passed. The pains continued; and half an hour later, a third portion, equal in volume to either of the others, was voided; after which the pains subsided, and the uterus was felt hard and contracted, as after natural labour. Altogether a considerable quantity of blood lost, and my patient was very faint; but at the expiration of an hour, I was able to leave her in as good condition as that of woman recently delivered of a child, with after-pains and lochia fully established.

The sequel was most satisfactory. She went through the usual routine of a lying in. On the third day, there was a profuse secretion of milk; and the involution of the uterus subsequently proceeded as after childbirth.

I made a careful examination of the substance expelled. It filled a chamber-pot and a half. So far as I could ascertain, there was little or no fluid discharged from the uterus. I could find nothing representing feetus or placenta; but several large masses of solid half-organised coagulum, and pieces of tough white membrane. The bulk of the mass was made up of transparent vesicles, varying in size from one-eighth of an inch to an inch and a half in diameter; and these were arranged in lines and clusters, like branches of grapes, and were attached to the pieces of membrane and coagula.

I need hardly say that I was unprepared for the advent of such a

"baby." My patient had so often spokem to me of feeling the movements of the child, that I did not for a moment doubt the presence of a fætus in utero. The hæmorrhage I had accounted for, by supposing there was some malposition of the placenta.—British Med. Journal, July 13, 1867.

## Materia Medica and Chemistry.

DR. RICHARDSON'S STYPTIC COLLOID.

This preparation was brought before the Profession at the first of Dr. Richardson's lectures, to which we have previously directed attention. It consists of ether and alcohol, saturated with tannin and gun-cotton. When diluted with an equal quantity of ether, it may be used in the form of spray. Undiluted, it is applied with a brush. The fluid coagulates the blood, serum, albumen, liquor sanguinis, and pus. When brought into contact with a wound, the ether and alcohol are volatilised by the heat of the body, and the tannin and gun-cotton are left intimately combined on the surface. The tannin converts the albumen into tough leathery membrane. The cotton gives a certain consistency. Numerous experiments, some of which were repeated at the lecture in question, show that solidification of the fluids is not the only effect, but that deodorisation is produced by this application. As the animal tissues form a combination with the dressing, the exclusion of the air is perfect, and the healing process uninterrupted. After operations, or in recent wounds from accident, the treatment by this process is most simple, and reduces the cases to a state similar to that of sub-cutaneous lesion.

The edges are to be brought carefully together (with a suture when necessary) in the usual way. Then the *styptic colloid* is to be applied freely with a brush. A thin layer of cotton wool soaked in the colloid may then be laid along the line of the wound, and, if thought advisable, a further layer of the liquid laid on with the brush. In a suppurating wound it is only necessary to brush over the surface, so as to leave a layer of colloid upon it.

Compound fractures may, in Dr. Richardson's opinion, be most advantageously treated with this new remedy. The styptic colloid may be poured into the wounded cavities, and thus the case reduced to one approaching simple fracture.

A great advantage of this dressing is that it need not be removed unless there were fector from the wound prior to its application, or unless it should be raised by fresh discharge, or symptoms of suppuration should occur.

Finally, this styptic forms a base for other remedies, among which may be named creasote, carbolic acid, quina, iodine, iodide of cadmium, bichloride of mercury, morphia, cantharidine,&c.—Dublin Medical Press, May 8, 1867.

#### PHOSPHORUS PILLS.

Dr. Radcliffe having tried various means of administering phosphorus, has at length succeeded in effecting this in the form of pills; and as other medical men are now ordering phosphorus in this form, we have thought it desirable to publish the formula for the information of our readers. Take of phosphorus six grains, suet six hundred grains, melt the suet in a stoppered bottle capable of holding twice the quantity indicated; put in the phosphorus, and when liquid, agitate the mixture until it becomes solid; roll into three-grain pills, and cover with gelatine. Each pill will contain one-thirty-third of a grain of phosphorus.—

Pharmaceutical Journal.

#### NARCEINE.

Narceine is coming into great fashion amongst the French to replace morphia. The dose generally given internally, is from a sixth to half a grain. At the outset it diminishes the pulse, but subsequently accelerates the pulsations. It does not seem to produce constipation, but rather a free action of the bowels. It is said to retard menstruation. Dr. Eulenberg prefers it to any other narcotic, and gives it in neuralgia, in painful affections generally, and articular disease, iritis, cystitis, and orchitis, stating that it produces sleep "which is soft, tranquil, uninterrupted, and followed by a quiet awaking." Narceine is reported to be preferable to morphia as a general rule, and to act effectually in those cases in which morphia fails.—Philadelphia Med. and Surg. Reporter.

Burns or Scalds.—The following is one of the best applications we know of in cases of burns, or scalds, more especially when a large surface is denuded of the cuticle:

Take one drachm of finely powdered alum and mix thoroughly with the white of two eggs and one teacup of fresh lard; spread on a cloth and apply to the parts burnt.

It gives almost instant relief from pain, and by excluding the air prevents excessive inflammatory action. The application should be changed at least once a day.—St. Louis Medical Reporter, May 1867.

Syrup of Santonine.—The following formula has been suggested as an agreeable vermifuge: Santonine, 55 grs.; Syrup, 10 oz. (Troy.) Dissolve the santonine in a little alcohol, and add to the syrup, boiling hot.—Ex.

# Canada Medical Journal.

MONTREAL, JULY, 1867.

#### AN HOSPITAL FOR SICK CHILDREN.

The excessive mortality amongst children, which takes place annually during the months of July and August in Montreal, has at length, we are glad to say, aroused the attention of a few philanthropic individuals, and, if we are not mistaken, an Hospital for sick children, is a means which seems to them capable of doing not a little to lessen this really sometimes frightful death rate. Just so long as we have weather which for days sends the thermometer up to the nineties, with sudden falls of thirty and forty degrees-will we have hundreds of cases of cholera infantum, especially among the lower classes—where foul air and an improper diet starts the disease in children whose systems are predisposed to disease from the irritation of dentition. We are constantly asked in the daily newspapers the cause why so many children are cut off during the months we have named, and in truth, perhaps the question is one which is difficult to answer to one's entire satisfaction. The intense heat, with sudden changes, is no doubt one of the primary reasons to inaugurate the disease, but the cause of the excessive mortality is, we believe, to a certain extent, under control. It is perhaps not generally known, but we believe we can assert it as a fact, that hundreds of children die during what we may term the sickly season, without ever having received advice from or being seen by a physician. Their parents are too poor to employ professional assistance, and there is no institution where these little sufferers can be admitted and cared for. Even in cases where professional assistance has been obtained, many cases prove fatal, simply from want of proper care, and the inability of parents to purchase articles essential to sustain life. There is perhaps no disease of infancy and childhood which requires such close watching and prompt treatment, as does that known under the name of cholera infantum, and, as we have already said, many perish simply from a lack of it. Were an Hospital for sick children in existence, how many mothers would gladly avail themselves of it, when

sickness struck down their little ones. At home but little kindness can be shown them-perhaps a half dozen others claim attention while household duties, such as cannot be postponed, occupy much of the time that would otherwise be devoted to the sick child. Again, many a time the crowded room, and vitiated air, closes for ever any chance the little one may have had. This and many other disadvantages which the children of the poor suffer from when ill, would be all obviated had we a children's hospital. Experience has proved their benefit, and if those who have taken the matter in hand can only get the sympathy of our population, we hope ere many months have passed away to be able to chronicle the successful starting of such an institution in Montreal. In Edinburgh, a city not much larger than our own, an Hospital for sick children has been in full working order for some nine years, and with a success that has done not a little to reduce the infantile mortality of that place. At the sixth annual meeting of the Edinburgh children's Hospital, held in 1864, Sir John Don Wanchope said that a few years before the death rate among children under five years of age, was never below 45 and often reaching 50 per cent. It was then but 27 per cent, and he felt sure the Sick Children's Hospital has done not a little to produce such a gratifying result. In Montreal, we have the enormous death rate of fully fifty per cent of all children under five years of age. If such results as we have mentioned followed the establishment of the Edinburgh Hospital. surely we can hope for a similar result, should we follow their example. in the foundation of such an institution. We sincerely hope that those gentlemen who have taken the matter in hand will not let the subject rest, but will agitate it, and press it to a successful issue.

#### THE ETHER-SPRAY IN UTERINE HÆMORRHAGE.

Dr. T. C. Thompson, of Matagorda, Texas, in a letter to the *Philadel-phia Medical and Surgical Reporter*, relates the case of a lady "three months enceinte threatened with abortion; and, after failing with usual remedies to prevent it, an alarming hæmorrhage followed, which defied all treatment by opiates and astringents, cold applications and buckets of water; and, while arranging some cloths for a tampon, I was induced to try rhigolene spray to a circle of about two inches in diameter immediately over the womb. Contraction of the inert uterus followed, and, of course, cessation of hæmorrhage. How much less inconvenient and disagreeable such simple means of relief is to the patient, than by flooding the bed, and chilling your patient with buckets and cloths of water."

We take pleasure in calling attention to the notice in our advertising sheet, of the private course of lectures to be delivered by Dr. H. R. Storer, of Boston, upon the "Surgical Diseases of women." The course is intended exclusively for graduates, and will cover in as thorough and practical a manner as possible, all that experience up to the present time has shown to be available in the relief of this class of disorders.

It is needless to allude to Dr. Storer's qualifications for this task, as he is already widely known in this country, and as the associate of Sir J. Y. Simpson, of Edinburgh, in 1854-5, and one of those selected by him to edit his obstetric works, his reputation abroad is enviable.

CANADIAN MEDICAL SOCIETY.—A movement has been started under the auspices of the Quebec Medical Society, to establish a Medical Society for the Dominion of Canada. The following resolutions were unanimously adopted at a recent meeting of that Society;

Resolved, 1. That in the interest of the public and the Medical Profession, it is desirable to adopt such means as will insure an UNIFORM system of granting license to practice Medicine, Surgery, and Midwifery, throughout the Dominion of Canada.

2. That in future, all medical degrees or diplomas of Universities, Colleges, or Schools of Medicine, shall have merely an honorary value, and licenses to practise Medicine, Surgery or Midwifery, in the Dominion of Canada, shall be granted by a Central Board of Examiners, in each Province, before whom all holders of Degrees in Medicine, or Diplomas for Surgery, or Midwifery, shall appear for examination.

3. That a committee of seven members be named by the Medical Society, to confer with the various Universities, Colleges, and Medical Schools in Canada, on the subject of the establishment of a Central Board of Examiners, before which all candidates for license to practise medicine in the Dominion of Canada, shall be examined.

4. That the Quebec Medical Society recommends the calling of a Convention of Medical Delegates, from Universities, Colleges, Schools, Medical Societies, &c., in the Dominion of Canada; to meet at the city of Quebec, on the second Wednesday in October, 1867, for the purpose of adopting some concerted action, on the subject of medical legislation, in conformity with this report, and for the formation of a Canadian Medical Association."

## CANADA

# MEDICAL JOURNAL.

### ORIGINAL COMMUNICATIONS.

Cases of Acute Rheumatism, complicated with congestion of the Lungs. By R. W. Jackson, F.R.C.S.I., &c., Surgeon to the 100th Royal Canadian Regiment.

During the past winter cases of Rheumatism have been both numerous and very severe, with tendency to various complications, in my limited practice in the head quarter wing of the 100th Regiment, and also in the experience of the profession in Ottawa, as I have ascertained by reference to several of the faculty here. I submit the accompanying cases, complicated in one instance with pulmonary congestion which proved the cause of death; and in the other with cardiac symptoms and also pulmonary congestion, happily proving but temporary derangements of function.

Case 1.—Private J. Vanburen, aged 26 years, service eight years.

Disease, Rheumatismus Acutus—Admitted to hospital, December 31st, 1866.

January 1st.—A strong well built man, has been but three times in Hospital since enlistment; had fever at Malta, came to hospital on Saturday last complaining of a cold and pain in chest; was detained for the day, and as he reported himself well at the evening visit was allowed to return to barracks; was carried to hospital yesterday, symptoms on admission were fever, loss of power, and pain extending from shoulders to wrists, and from knees to ankles; pulse one hundred and twenty, compressible, tongue furred, bowels open. Had a grain of opium and warm bath on admission; with these symptoms this morning he also complains of profuse sweats at night when the pain in limbs is much aggravated; no cardiac symptoms—was ordered opium one grain, three times daily, an alkaline mixture and warm fomentations to arms and legs; at the evening visit he felt relieved by the fomentations.

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2nd. Slept none, wrists, ankles and knees swollen and intensly painful, is not able to move; tongue coated with yellowish fur, pulse one hundred and twenty eight; hearts action unaccompanied by any bruit; joints to be fomented with a warm solution of Bicarb soda; continued opium and alkaline mixture. Felt somewhat easier in the evening.

3rd. Slept little or none, has more power over limbs, pulse one hundred and twelve, sweating profusely, the sweat having the characteristic odor. As he complains of the exposure consequent on renewing the fomentations, the limbs to be swathed in flannel; continued opium and alkalies.

4th. Slept little, regaining more power over limbs, heart's action natural, sweats continue, slight diarrhea, urine clear; continued opium.

5th. Rested badly, joints less swollen, pulse one hundred and eight, regaining power of limbs, diarrhoa troublesome during the night, heart's action natural; continued opium.

6th. Doing well; soon after the evening visit he jumped suddenly out of bed in a wild and excited state; he had previously been asleep.

7th. Rested little last night; dozes more by day than by night; diarrhœa continues, sudaminæ over neck and chest, raved the greater part of yesterday and last night, pulse one hundred and eight, no cardiac bruit; at the evening visit it was found that he had raved all day, pulse one hundred and fourteen, purging continues, four stools since morning, which he passed in bed; skin acting freely, took nearly all his food, opium 1 gr. morning and night.

8th. No change since yesterday, but the diarrhœa is less troublesome. 5 P. M. Has been sleepless and excited all day, attempted to leave the bed several times, diarrhœa has ceased since the morning, took nutriment during the day, pulse about one hundred and sixty, heart's action tumultuous and excited, face pale and anxious, respiration hurried. Twelve leaches to be applied over heart, to be followed by fomentation and a linseed poultice; two grains of opium at 10 P.M. 10 P.M., leeches acted well, he is raving and looks wild, pulse one hundred and twenty, heart's action less tumultuous, skin hot and perspiring.

9th. Continued uneasy and restless all night, passed stools under him; about 5 A.M. he became insensible, had convulsive jerking of limbs, breathing became more embarrassed and he died at 7.50 A.M.

The post morten examination, 28 hours after death, was made in presence of Dr. Wills, R. B., and Drs. Hill, Grant and Wolff of Ottawa, and after a very careful examination of the brain, thorax and abdomen, the only lesion which could be found to account for death was the state of the lungs; the posterior two thirds of each lung was intensely congested, the lung tissue itself presented no appearance of inflammation having

taken place, nor was there any exudation of lymph or other product of disease in the pulmonary structure.

Case No. 2.—Private J. Joyce, ætat 38 years; service 6 years; disease, rheumatismus acutus. Admitted February 2nd, 1867.

A strong well built man; present is his thirteenth admission to hospital. There are marks of cupping over region of heart, he states he was cupped for inflammation of the lungs in 1860. Has been lately employed in the kitchen attached to the officers mess, and he thinks present attack was contracted there; was brought to hospital vesterday morning in a sleigh, as he was unable to walk, the left ankle joint is red and swollen, slight fever. Warm fomentations were applied to the ankle joint; slept some the earlier part of the night, awoke in a sweat, complains of pain beneath and around sternum; pulse 120, tongue white. slight cough, no cardiac bruit, is thirsty, ankle joint still swollen and painful; feels pain in left shoulder and right knee, bowels confined. To have a rhubarb draught and acetum cantharidis applied to joints affected. Vespere. Pain in chest relieved, right ankle joint swelling and very painful, bowels moved twice by the draught; the acetum lyttæ did not produce any vesication; to have hot fomentation to right ankle joint and opium gr iss at bed time; no cardiac bruit.

Feby. 3rd.—Slept pretty well, face flushed, pain in back of head caused he thinks by his having slept on his back, tongue white, pulse 102, left ankle and right knee chiefly affected; second sound of heart not sharp or distinct, urine high coloured and acid. The tincture Boleti-Laricis was given in drachm doses every three hours. Vespere. Profuse sweat, pulse 108. Second sound of heart more distinct than at the morning visit.

Feby. 4th.—Slept little, but feels easier, skin hot and perspiring freely, pulse 100; cannot use arms without difficulty in consequence of muscular pain, same joints as heretofore still affected; continued tineture boletus. Vespere. No improvement, pulse 120, no cardiac bruit, bowels not opened since he had the rhubarb draught on admission, is sweating profusely, urine high coloured and acid, tongue cleaner.

Feby. 5th.—Slept about three hours last night, finds most relief when propped up in a sitting posture; the acid sweats continue but not so profuse, tongue white, pulse 106, face has a yellowish tinge, urine high coloured, bowels constipated, all the joints more or less affected, there is also considerable muscular soreness; to have a purgative draught of sulphate and carb magnesia with 20 minim of Vin Colchici every four hours. Vespere. No change, purgative draught has not acted yet.

Feby. 6th.—Slept about one hour towards morning, was purged twice, face sullen and anxious, tongue white, pulse 110, sour sweats continue

sudamina over chest, urine high coloured, no cardiac bruit, pain in joints easier, complains of feeling of tightness across chest, right ankle joint still much swollen; blister to be applied to outer and inner side of right ankle; the colchicum draught to be continued until a few more fluid stools result; turpentine fomentation to chest. Vespere. Appears better, sweating continues, bowels moved freely, omit purgative, and opii gr iss at bed time.

Feby. 7.—Dozed a great part of the night, appears better, pulse 100, tongue cleaning; deposit of urates, expression of face less anxious. In the evening complained of pain in the chest and cough. To have expectorant mixture and opii gr iss at bed time.

Feby. 8.—Slept well till 2.30 a. m., feels better, cough less troublesome, respirations 56, pulse 98; respiratory murmur harsh over front of chest: on percussing over back of lungs the greater portion was found dull with marked vocal resonance and tubular breathing. About two ounces of bronchial mucus has been expectorated mixed with blood in streaks, several cupping glasses (dry) were immediately applied to front of chest, followed by a hot poultice. Drs. Grant, Wolff, and Henry, happened to visit the hospital at the same morning and kindly examined the case, and after consultation with them, a large blister was applied over back of lungs, the following mixture was administered R tart, antimon grs ij, infusi Senegæ 3 viii tinct. hyoscyamiæ, tinct, scillæ àà 3 ii every three hours. 3.45 p.m., has dozed occ tonally during the day, and is now bathed in a profuse soun smelling sweat. Respiration 32. Pulse 104. Thirst distressing. 9.30 p.m. Blister has raised; less pains in chest, passed a fluid stool. Bulse 100. he is to lie on right side, position has hitherto been on the back. To have a large linseed poultice to surround chest completely; continue antimonial mixture while awake, and opii qr j at 10 p.m.

Feb. 9. Was easy during the night, although he did not sleep more than a few minutes at a time. His general appearance is better; pulse 92; respiration 36. Complains of the irritation of the blister. Had slight strangury last night; urine is like dark-coloured beer; not much cough; spat bronchial mucus to about two ounces; dullness over back of lungs less, with also decreased vocal resonance. Continue the antimonial mixture with opium gr. j. at noon, and repeat at night. There is no cardiac bruit.

3 p.m. Had an attack of pain in chest, beneath and around sternum chiefly. Pulse 92. To be dry cupped over seat of pain, and then turpentine stupes applied.

9 p.m. Pain in chest relieved; feels most pain in right knee. Pulse 96: breathing easier.

Feb. 10. Passed an easy night, though he did not sleep. Tongue clean and breathing free; left wrist swollen and painful. There are several patches of ecchymosis on chest, the result of the dry cupping. Pulse 96. First sound of the heart almost inaudible. The dullness and vocal resonance over back of lungs is decreasing rapidly as the bowels are relaxed, and systolic sound of heart is defective. The further employment of a depressant is contra-indicated, so the antimonial mixture to be omitted, and the following mixture substituted R chloratis potassæ 3 ij tinet. cinchonæ 3 iij, infusi cinchonæ 3 viii 3 j every three hours.

At 2 p.m. there was a return of the pain in chest. Relieved by fomentation.

7. p. m. No pain in chest. Pulse 88; respiration 32. Takes sufficient nutriment. A distinct bruit over aortic valves with first sound, and becoming less distinct on approaching the apex; no pain on pressing over cardiac region. A blister was applied over heart.

Feb. 11. Passed a bad night; dozed a little. His general appearance is, however, improved; skin cool; pulse 88; respiration 32; urine clear and slightly acid. The creaking bruit is very distinct with heart's first sound. There is considerable difficulty in percussing and examining back of lungs, in consequence of the soreness due to the blister; however, the lungs are gradually recovering their previous condition.

12th. Improving; bruit not so distinct; bed sores appearing over sacrum.

13th. Was delirious during the night. The cardiac bruit is not audible until he is raised to a sitting posture. Bed sores increasing, both superficially and in depth. From this date he gradually improved, but had a tedious convalescence, and was discharged to light duty on the 25th of March.

Ottawa, C.W., June, 1867.

Poisoning by Sulphuric Acid. By Joseph M. Drake, M.D., House Surgeon Montreal General Hospital. Post Mortem appearance reported by John Bell, A. M., M.D., Apothecary to the Hospital.

G. W., Bill-Poster, was brought to the Montreal General Hospital, on May 2nd, 1867, about 7 A.M., by two men who stated that he had taken poison. On further inquiry the men informed the House Surgeon that W. (who had been for some time labouring under great depression of spirits), had gone into the back yard of his dwelling, where he was seen,

by his wife at about half-past five, in a state of great suffering. At that time he was able to speak, and told his wife that he had swallowed a large quantity of Oil of Vitriol, which drug it appears he kept in stock for the preparation of blacking. W's wife found the bottle of oil of vitriol, on the counter in the shop. It had been recently used, and the counter and floor were burned by what had been accidentally spilled, so that no exact opinion could be arrived at as to the quantity swallowed. According to his own statement he "took about a glass," i. e., two ounces.

Nothing was done for the poor fellow till he arrived at the hospital except that an emetic had been given.

On admission he appeared in a state of collapse—the extremities were cold and nails livid—the skin cold and perspiring—pulse at the wrist thready and almost imperceptible. He could not articulate distinctly, but was quite sensible to what was going on about him. He appeared, restless, turning himself about, and continually by signs and sounds demanded water to quench his dreadful thirst.

Water being offered, with a quantity of carbonate of magnesia, it was evident he had the greatest difficulty in swallowing, though he took it eagerly; and no sooner were a few mouthfuls swallowed than they were immediately rejected by vomiting. A quantity of oil was then given him, but with the same result.

The mucous membrane of the lips was thickened and white. No blackening of any part of the integument was observed. The teeth were of a chalky dead whiteness and had completely lost their polish. The mucous membrane of the tongue and mouth was corrugated, thickened and milky white. His clothes were discolored by the acid which had fallen upon them in several places.

He died about an hour after admission still crying for water, but not appearing to suffer much except from the tormenting thirst.

The post mortem examination was made twenty-two hours after death. The body presented a natural appearance. Rigor Mortis well marked. The face looked calm and placid. The edges of the lips were dry and of a brown colour. The mucous membrane of the mouth was white, and appeared as if it had been recently rubbed over with nitrate of silver. The tongue was thickened, white and sodden.

On opening the abdomen a large quantity of dark brown fluid covered the omentum. This fluid was intensely acid in its reaction. After sponging it out, the omentum was found to be of a dark olive colour, marked with black streaks corresponding to the course of the veins, the blood in which was coagulated.

When the thorax was opened a large quantity of fat was seen in the

neighbourhood of the pericardium. The lungs were almost collapsed. There were adhesions on the left side between the pulmonary and costal pleuræ. With these exceptions the lungs were healthy.

The omentum was very friable. The small intestines were very much contracted in their calibre, their coats were much thickened and hardened, so that when pinched with the fingers the impression remained. The back part of the colon where it overlies the stomach was thickened and hard.

Nearly the whole of the stomach was as black as ink. The greater pert of the large curvature and posterior wall of the stomach was eaten away, so that when this viscus was lifted out, the bottom part of it hung in black shreds. Its anterior surface was in great part occupied by a large mass-of about three-fourths of an inch in thickness-of moist black plastic matter, like carbonized coagulated blood. This would appear to be the excessively congested wall of the stomach carbonized by the sulphuric acid-whose action on the inferior and posterior surfaces completely disintegrated them. The mucous membrane of the bowels was much shrunken (making the vavulæ conniventes very prominent), and so much decomposed by the action of the acid, that the slightest friction separated it from the tissue beneath and reduced it to a coarse granular powder. On opening the intestine the mucous membrane was of a dark green colour, and contained a small quantity of fluid, also of a greenish colour. On exposure to the air, however, the mucous membrane changed to a reddish tint.

The jejunum was perforated in several places, and when handled fell to pieces almost as easily as wet paper.

The mucous membrane of the esophagus was whitened and somewhat streaked with brown, but the other tissues of this canal were not much thickened or injured by the acid.

The liver externally was of a greyish colour. Its appearance and consistence gave the impression of its having been boiled. The under surface of the large lobe and the whole of the left were hardened. On cutting into the liver the knife passed first through a light ashy grey layer, then through a blackish brown stratum which shaded into the more normal but congested hepatic tissue in the middle of the organ,

The diaphragm over the stomach was blackened, and the discolorations extended up into the the pericardium which was of a livid hue in its lower part. The blood in the veins of the posterior surface of the heart was firmly coagulated, while that in the veins of the anterior surface was fluid—the coagulation in the former evidently taking place from their proximity to the acid in the stomach. The right side of the heart contained a quantity of dark coagulated blood; the left side was empty.

After removal of the calvarium the vessels of the dura mater were observed to be somewhat congested and prominent, as were also those of the pons varolii. The white substance of the cerebrum was much tougher than normal. The brain substance was of an acid reaction, as shewn by litmus paper.

#### REVIEWS AND NOTICES OF BOOKS.

The Renewal of Life. Lectures chiefly Clinical, by Thomas King Chambers, M.D., Honorary Physician to the Prince of Wales, &c., &c. Second American from the fourth London edition. Philadelphia: Lindsay & Blakiston, 1867. Montreal: Dawson Bros.

In December 1865, we reviewed at some length the first American edition, and expressed how very thoroughly we estimated the value of the work. The present edition does not contain any additional matter, as immediately after the issue of the previous one Dr. Chambers was struck down with a serious illness, which compelled him for a considerable time to discontinue work, and leave England. On his return, he found a new edition demanded, and not having collected more material was compelled to be content with a thorough revision. This revision, however, has given even more force than previously to his book, which is certainly for professional and scientific writing—the most readable we ever met. There is also a depth of originality pervading the work—which is one of its chief values. We can very cordially commend the book as a most instructive one.

Lectures on Public Health. Delivered at the Royal College of Surgeons, Dublin, by E. D. MAPOTHER, M.D., Professor of Hygiene. Second edition. Dublin: Fannin & Co.

We are under obligations to the talented author for a copy of the above work, which is considerably enlarged from its original size. Many of the lectures have received additions, while ten entirely new ones have been added, bringing everything up to the latest date, concerning matters of Hygiene. Chapter xviii is devoted to Cholera, especially reviewing the epidemic of 1866, which is done most thoroughly. Dr. Mapother proves beyond the possibility of cavil, that Cholera was imported into Dublin on the 26th of July, 1866, by a girl who on that day arrived from Liverpool, and from a locality of that city where the disease was rife. She was ill on the passage across, and died some twelve hours

after arrival. From this focus he traces step by step, the gradual increase of the disease in Dublin; but he also shows that it was not until six other authenticated cases were imported from Liverpool, and became distributed through the city, that the disease became epidemic. When this occurred of course it was impossible to trace the contagiousness of each individual case. While Dr. Mapother advocates the contagiousness of the disease, he says, "I do not think that contagiousness alone will account for its developement and spread," and he uses the word contagion here, as having a meaning similar to the familiar term "catching." He also asserts, and of this there can be no doubt, that Cholera is not so infectious as fever, scarletina or measles, that is in its power of being carried considerable distances through the air. On the treatment of Cholera, as might be anticipated, Dr. Mapother is brief. cal treatment proper he does not mention, giving what little space he does devote to the subject to the sanitary measures he considers advisable during the prevalence of an epidemic. He insists strongly upon isolation, stating that when patients have been speedily removed to hospitals, a second case very seldom occurs on the premises-while, when they are allowed to remain, a number of cases follow each other. He would remove the patient, no matter in what stage he may be. mortality in Dublin in 1866 was 47.22 per cent. We consider these lectures of Dr. Mapother exceedingly valuable, and only wish it were possible for a copy to be put in the hands of all those in authority.

## PERISCOPIC DEPARTMENT.

## Surgery.

CLINICAL LECTURES ON STONE.

BY JOHN ADAMS.

Senior Surgeon to the London Hospital.

There is often difficulty in deciding whether a patient had better be cut for stone, or whether it is not preferable to break up the stone in the bladder, as in the operation of lithotrity. No doubt the latter operation is preferable when circumstances are favourable, but the same may be said of any operation. The subject is, however, now so well understood that it is unnecessary to say much about it, although, even now, some surgeons are in favour of the old operation of cutting in all cases, and decline to adopt the opinion expressed by Sir Benjamin Brodie, that lithotrity is the operation for stone and lithotomy the exception.

I show you some debris of stone which a patient voided after repeated crushings, and by which he was eventually completely cured. The patient was a gentleman, 72 years old, and suffered under the ordinary symptoms of stone. The case was one of unusual facility for operation. The bladder, although irritable, was able, under a slight administration of chloroform, to hold a few ounces of water; the urethra was large, and the stone was soft and friable, so that a large quantity of phosphatic matter was readily withdrawn by the scoop lithotrite repeatedly introduced at each sitting. He was scarcely confined to his house during the various operations, and was able to go about his usual business, which required a great deal of walking. The fragments are of great size, and he had very little difficulty in getting rid of them per vias naturales.

It is, however, in cases where the stone is large and hard, that lithotrity is inadmissible, and lithotomy must be resorted to. But it is not my intention to go into the whole history of cases of stone, and to consider a subject on which so many surgeons delight to dwell. I want to direct your attention to cases which are of very frequent occurrence, cases unfortunately within the experience of most surgeons, in which it is better not to operate at all, rather than incur the risk of destroying the patient at once by the performance of the operation of lithotomy. Certainly there are many cases in which the suffering of the patient is so great that death is less to be dreaded than a continuance of life, and the surgeon is inclined, or is even solicited, to operate, by way of attempting something which may, perchance, relieve his patient. Such operations are almost invariably futile and terminate unsuccessfully, and should, in my opinion, be avoided. But I admit the difficulty in coming to such a conclusion, and I am always too glad to adopt any suggestion at variance with this opinion, provided the patient's sufferings justify me in this respect; but I have long since ceased to advise on operation where the prospects of success are nil.

In the museum of the College of Surgeons there is a stone which weighed over forty ounces. The operation of lithotomy was commenced by Mr. Clive senior, but the attempts at its removal were futile, and the patient, Sir Walter Ogilvie, died almost on the operating table. No attempt ought to have been made to remove this stone, which, in consequence of its size, could not have passed through the pelvis. However, as the argument is ex post facto it is scarcely worth all the consideration to which it would otherwise have been entitled. At any rate the removal of such enormous calculi should never be attempted.

Two cases of stone in the bladder occurred to myself some years ago where, from the size of the stone in each, and from the obvious disease

of the entire urinary apparatus, no attempt at removal was deemed advisable, and the patients gradually sank with no extraordinary amount of suffering.

Mr. Coulson, in his valuable book on "Lithotrity and Lithotomy," has collected from various sources, cases of very large stone successfully removed by operation; but it may be generally stated that stones exceeding twelve ounces in weight can very rarely be successfully extracted after cutting.

A friend of my own, advanced in years, was cut by the late Mr. Key, assisted by Sir Benjamin Brodie, but the stone was so large that it could not be extracted, and the patient died immediately after his removal to bed. Such cases must have occurred to most surgeons of experience, and it has frequently happened that the patient has run the gauntlet of all the bystanders in the operating theatre, and yet no force could remove the stone owing to its great size, notwithstanding large incisions were made on both sides of the prostate gland.

But to what do my observations tend? Simply to this, that in very many cases of stone no operation by cutting should be attempted; and that, if lithotrity fails to effect a cure, such cases should be let alone, and life, which may often be prolonged, should be made easy by suitable medicinal and diatetic measures. My remarks are especially applicable to persons of advanced age; for in these, as the stone increases in size, it ceases to roll against the neck of the bladder, and thus the greatest cause of irritation is gone; besides, the prostate is often large in such cases, and this also keeps the stone from coming in contact with the sensitive cervix vesicæ.

A gentleman, whose case is familiar to me, has been the subject of stone in the bladder for many years; his age is between 70 and 80, and his life seems likely to be prolonged even much further; he remains in the recumbent posture either in bed or on the sofa, and all irritation is either prevented by this position, or is subdued by opium.

Three years ago a gentleman, eighty years of age, consulted me about a constant passing of bloody urine, accompanied by an irritable state of the bladder. I sounded him and found a stone. I advised that an attempt should be made to crush it by lithotrity. He declined to have any operation performed. I ordered him some henbane and liq. potassæ, and on calling on him in the country the summer before last, I found that he had gone out from home, and was told that he was in a comparatively comfortable state, and had little or no suffering. I have recently heard from his surgeon that he suffers little or nothing from the stone, except an occasional attack of hæmorrhage.

A patient nearly 80 years of age was brought to me last year with symptoms of stone. I sounded him and found a large stone. I introduced the lithotrite, but could not grasp the stone owing to its size. He declined any further attempts at operation. He is now in comparative health, but he is obliged generally every night to draw his water off, and by this means he keeps himself in comparative comfort.

A gentleman was brought to me from the country by his surgeon with stone in the bladder. His age was 72, and he was a comparatively healthy man, and suffered little, and when quiet at home in the recumbent or sitting posture, felt no inconvenience. I could not seize the stone with the lithotrite in consequence of its size. I advised that no operation should be performed, but that he should keep himself quiet, I ordered him henbane and potash. I have reason to believe that he is now in comparative ease, having undergone no operation whatever.

I should be exceedingly sorry to attempt to dogmatise on such slender experience as I have had in cases of this description, but I am anxious that surgeons should, in such cases as I have referred to, pause e'er they advise an operation, which, under such unfavourable circumstances, would be almost necessarily fatal, and to try whether life may not be rather prolonged by palliative treatment. Of course, my observations may be met by counter-statements of other men of larger experience who have operated on persons of advanced age, and have successfully removed very large calculi from the bladder: it is rather the indiscriminate use of the operation that I take the liberty to object to, being satisfied that death must almost of necessity be the result of operative interference. But I admit that it is almost impossible to lay down any rules to regulate our practice in many unfortunate cases. Much must be left to the prudence and discrimination of the surgeon.

It is not only that the size of the stone in old persons forms a fatal objection to lithotomy, but there are many other serious complications which should deter us from the performance of an operation which is attended with material danger, however dexterously performed. Thus, the discharge of pus with the urine, accompanied by emaciation and hectic albuminuria to any extent, the mixture of blood and pus, and intense pain in the bladder, indicative of ulceration of this viscus, may be mentioned as almost invariably prohibitory of lithotomy.

No doubt, in many cases, as the stone increases in size the symptoms diminish, a fact which admits of easy explanation: and if the ordinary symptoms are mitigated, it follows almost as a necessary corollary that those effects—more remote, but, perhaps, of more importance—are also diminished. Thus, inflammation of the bladder subsides, the ureters

resume their original healthy condition, and the kidneys, if not already damaged, continue to discharge their wonted and important functions. I admit that such a consummation is scarcely to be expected; but the occasional persistence of comparative health under such a serious complication, as a large stone in the bladder, justifies a hope that life may be prolonged without any very great suffering.

A case was related to me last week which proves two things bearing on the subject now under our consideration. A gentleman, 70 years old, had had stone in the bladder many years, the size of which was such, that no operation was deemed advisable in his case. The symptoms gradually diminished, and he suffered little or nothing. One day he fell back suddenly, and he felt something give way in his bladder; inflammation of this viscus commenced; urgent symptoms occurred, and he soon sank under their effects. There can be no doubt that in this case the stone, which had been originally fixed, was dislodged by the concussion, and thus became a source of fatal inflammation to the bladder and kidneys.

The treatment to be followed in such cases may be very briefly described, and consists of—1st, rest, as much as possible in the recumbent posision; 2ndly, the hip-bath; 3rdly, the administration of alkalies and henbane; 4thly, opiates in moderation; 5thly, the employment of the catheter occasionally, and if the pain in the discharge of the urine is excessive and followed by painful spasm of the bladder, an elastic catheter may be retained in the bladder to allow the urine to dribble away; attention to the bowels, and simple, but not abstemious, diet should also be enjoined.

Irrespective of the surgical aspects of cases of stone in advanced age, and under serious pathological conditions, a case may assume very great importance in other respects. I may illustrate my position by reference to a case well known to many surgeons of this metropolis. A gentleman between 70 and 80 years of age, had stone in the bladder. His sufferings were not acute, and no operation was advised, or, if advised, was not assented to. His life was heavily insured, and, by the articles of insurance, he was entitled to a large quinquennial bonus if he lived beyond a certain day. He outlived the specified time, and his family thereby received a very large addition to the original policy at his death. What would have been the case had he submitted to the operation of lithotomy? Certainly, he might have recovered, but the chances would have been, in my opinion, much against him.

Hospitals for Calculous Diseases. -- I cannot help thinking that those philanthropic men who appear to be so earnest in advocating the neces-

sity for special hospitals, would do some real good to society if they would erect an institution for the admission and treatment of such cases as are beyond the powers of the ordinary surgeon—I allude to such cases of stone in the bladder as do not admit of relief by the operation of cutting or lithotrity—we might thus have the means of judging how long life might be prolonged, and pain mitigated, by careful treatment. We should then possibly be spared the immense mortality in stone operations—a mortality obviously materially enhanced by the too frequent performance of lithotomy when cases are positively hopeless.

Whilst these remarks have been passing through the press, I have seen the observations on stone, by Mr. Cadge, of the Norfolk and Norwich Hospital. The cases have most forcibly struck me as esssentially corroborative of my opinion, and deserve the most careful reading, as proving, rather more than I have attempted to prove, that even lithority cannot always be advocated in advanced age, when there is reason to believe that the bladder and kidneys are much diseased.—Medical Press and Circular.

OBSERVATIONS ON THE TREATMENT OF TRAUMATIC TETANUS. RE-PORT OF CASES RELIEVED BY OPIUM, BROMIDE OF POTASSIUM AND THE CALABAR BEAN.

By W. T. BRIGGS, M. D., University of Nashville.

All investigations with the knife have hitherto failed to shed any light upon the pathology of Tetanus. No change is appreciable sufficiently often to stamp it as the proximate cause of the disease. Occasionally changes are present; the rigor mortis is at times excessively marked; again, there is no rigidity at all; sometimes the brain is congested or inflamed, with serious effusions in the arachnoid and the ventricles; the next case may reveal a brain perfectly healthy in appearance; the medulla oblongata is sometimes congested or inflamed, then again normal. spinal cord is alike subject to appearances as inconstant and varied as those mentioned. The blood in some instances manifests no disposition to coagulate, in others it presents a firm clot—the nerves around the seat of injury in some cases are inflamed or lacerated or bruised, in others, they have undergone no change. The lungs, larynx and alimentary canal oftentimes present evidences of disease, but these morbid appearances are all due to accidental causes. In many cases not a single appreciable morbid appearance is manifest throughout the whole body; yet there must be some organic change in the spinal axis to give rise to such violent and fatal symptoms. The probability is that the nerve cells and fibres

of the spinal axis undergo some change from their normal condition unappreciable to us at the present time.

Whatever may be the changes in the nerve tissues, Pathologists are now pretty well agreed that Tetanus is dependent on an excessive irritability—an exalted polarity of the spinal axis. The symptoms arising from a poisonous dose of strychnine, which is a powerful spinal stimulant, are so analogous to the symptoms of an ordinary case of Tetanus that they are with difficulty distinguished, and the mode of death is similar in each, viz: by spasmodic closure of the glottis, spasm of the heart, or by general exhaustion—which facts go far to sustain the view that both are dependent on analogous pathological conditions.

If such is the true pathology of the disease, (and we have not the slightest doubt of it) the indications for its treatment are plain and rational.

1st. To remove any visible source of irritation.

2d. To subdue the excessive irritability of the cord.

3d. To sustain the general system in the terrible ordeal through which it has to pass.

To carry out the first indication, special attention should be paid to the wound. If any foreign substance have been retained, it should at once be removed; if any accumulation of pus, it should be evacuated; and if there is reason to believe that any considerable nervous branch is partly divided or bruised, its connexion should be severed from the branches above, if it can be conveniently effected. Every wound should be covered with an emollient poultice saturated with lead water and laudanum. Feculent accumulations should be removed as soon as possible; draughts of air should be avoided as they at once excite the clonic spasm; absolute rest, and quietude should be enjoined.

The remedies which will best suit the second indication, viz: to subdue the excessive irritability of the spinal cord, are the nervous sedatives, of which there is a large class. We should, if possible, select such as will fulfil that object without adding to the general exhaustion or deterioration of the system. In our opinion, the medicines best calculated by their physiological action to effect their purpose are opium, bromide of potassium, the ordeal bean of Calabar, the local application of ice to the spine, and woorari.

[Here follow some remarks on the employment of opium.]

The Bromide of Potassium was used experimentally in the hospitals of Paris in 1850, and in 1858 Dr. Sieveking, of London, read a paper on its use in the treatment of Epilepsy; since, it has been frequently used in nervous diseases, particularly in spasmodic affections of the excito-

motory system. From its calming, anti-spasmodic action we should judge it to be highly available in those affections. In full doses it produces peculiar effects on the nervous system, a tendency to sleep; dizziness; dryness of the fauces; dulness of the faculties and of the whole body; tottering of the gait; frequent disposition to lie down; relaxation of muscles; anæsthesia of the whole surface, and more or less torpidity of the genital organs. It acts as a direct and powerful sedative on the cerebro-spinal centres without affecting the medulla oblongata. It is attended with no injurious effects.

It would seem that this is THE REMEDY of all others to carry out the second indication; it is a powerful cerebro-spinal sedative, does not interfere with the great respiratory centre, is perfectly innocent in its action, and will doubtless prove to be a highly valuable addition to our therapeutics in this disease. It should be administered in thirty or forty grain doses every four hours, as long as it may be necessary to sustain its impression.

The Calabar Bean was first brought to the notice of the profession by Dr. Daniell, of Edinburgh, in 1846.

The bean is the part known to possess medical properties. The kernel is the most active part of the bean. The physiological action of the bean is exerted especially on the spinal marrow, it produces paralysis, loss of reflex action, contraction of pupil, giddiness and a feeling of torpidity, great weakness and faintness, and inability to much exertion.

The dose of tincture to begin with is five drops; of the alcoholic extract one-eighth of a grain, and of the kernel itself two to three grains to be repeated every three or four hours.

Ice applied locally to the Spine,—The sedative effect of ice or cold, applied to the surface of the body is well known. The temperature, the circulation and the special sensibility, are all lessened; the surface becomes pale, the tissues shrink, and its peculiar function is impaired or entirely suppressed. If the cold be continued, the power of receiving and transmitting impressions to the nervous centres, is lost, a sedative effect is produced on the blood vessels, nerves and cells. There is less blood and less nerve action in the part, and its influence is transmitted to internal organs. From the proximity of the spinal cord to the surface, it may readily be affected by the sedative action of cold, which, producing its physiological effects, would promptly remove all excessive irritability of the organ. We are satisfied that cold locally applied may, at least, act as an excellent adjuvant in the treatment of Tetanus.

In order to gain all the benefit to be obtained from cold in Tetanus, it should be applied by means of the "ice bags" along the whole course of

the spinal column and be continued for a considerable time, taking care not to freeze the skin.

The foregoing observations have been made in consequence of having treated two cases very recently upon the principles involved. There have been in the city in the last month or six weeks no less than six cases of Traumatic Tetanus, four of which have been fatal. The plan of treatment has not yet transpired in the fatal cases. Both of the cases treated by myself terminated in health. They are as follows:

On the 26th of May last, I was called to see John P., a stout, healthy boy, aged fourteen. A few days previously he had wounded his right foot in walking over some loose shingles, with a nail, which entered the sole on the outer side about the middle of the metatarsal bone of the little toe. He had continued to attend his work until two days before, when he complained of having a sore throat, with difficulty of swallowing, and some stiffness of the jaws.

At my first visit the tetanic symptoms were strongly marked, the mouth was rigidly closed, its angles drawn out; alæ of the nose expanded; muscles of the neck and back drawn; complete opisthotonos; the abdominal muscles and those of the extremities rigid as a board; the clonic spasm occurring every few minutes; pulse 100; skin bedewed with perspiration. The wound on the foot has a crust formed over its surface, was swollen and somewhat tender to the touch. Upon removing the crust a small quantity of sanious pus escaped. An emollient poultice saturated with lead water and laudanum was applied over the wound and a powder of calomel and jalap administered, to be followed by castor oil, with a drop of croton oil in four hours if necessary; after the free operation of medicine, a warm bath to be given.

5 P. M.—Medicine has operated two or three times freely, had remained in bath tub twenty minutes, all symptoms aggravated, jaws closed and firmly locked, deglutition very difficult; has to make several attempts before he succeeds in swallowing any fluid, spasms very severe and frequent, the slighest irritation of the surface exciting them, pulse 118. Ordered one-half a grain of morphia with a half drachm of Bromide of Potassium every two hours until the system was relaxed and the distressing symptoms somewhat relieved.

27th—9 A. M.—Patient had rested after third dose of the medicine; had slept two or three hours at one time. The clonic spasm had been greatly subdued, not occurring oftener than once in an hour or two; the sensibility of the skin greatly reduced so that frictions or draughts of air no longer excited spams; pulse 90; full and soft; respiration normal; the rigidity has not abated to any great extent: some relaxation of the

jaws but the opisthotonos was still complete; the præcordial pain had disappeared. Ordered a continuance of the bromide and morphia in same doses.

28th—Morning—Nurse reports that patient had rested pretty well until about 10 o'clock P. M. He was then seized with clonic spasms and great rigidity of muscular system; respiration difficult; deglutition almost impossible and he was thought to be dying. Chlorofrom was administered, as I had directed in such an event freely by inhalation, and after about two hours the excessive spasmodic action was overcome to a great extent, but the inhalation had to be used several times through the night in order to prevent a return.

In the morning he was quite calm but showed the effect of the night's storm. In the effort to prevent the closure of his jaws with a piece of wood he forced three of his incisor teeth from their sockets; his system showed evidence of exhaustion; the rigidity of the muscular system marked; jaws firmly closed; respiration normal and deglutition better. Ordered the bromide to be increased to 40 grains and the morphia to be continued; brandy and essence of beef to be given as required.

From this time the patient had no severe spasms. He slept three-fourths of each day; had no pain; breathing was easy; pulse 100; no difficulty of deglutition. The muscular rigidity however continued, especially in the dorsal muscles, and became worse whenever he was roused. He remained in this condition for ten days, taking his bromide regularly, with the morphia, brandy and nourishment. By the 15th day he was almost clear of the tetanic symptoms, his mouth was no longer locked and all rigidity had ceased except the stiffness in the back and right leg; he could, however, easily flex them at will. Morphia was discontinued on the 15th day and the bromide continued in half drachm doses three times a day.

At the present time, John has been perfectly well for two weeks, has improved in flesh, sleeps well and has fair appetite.

This boy was visited during his illness by very many Physicians who, without an exception, thought that he would die. It certainly was a bad case of the disease, and the relief most marked was obtained from the medicines as soon as their physological action was effected.

The amount of the bromide and morphia administered may seem excessive, but the result justified the means. During his illness of two weeks, he took more than a pound of bromide of potassium, and nearly three drachms of morphia, yet there was no injurious effect from either.

CASE 2d.—Michael D., an Irish laborer, aged 52, had been ill three days when visited, June 8th. He had all the symptoms of a tetanic

attack; He was unable to lie in the bed at all, but sat up in a chair and resisted the spasms by holding to a rope fastened to the wall. Upon questioning him, he does not recollect having received any wound upon the body, but upon examination, a wound of the second toe of the left foot was discovered, made two weeks previous by a stone rolling on it; in addition he had an old ulcer on the sternum, just above the ensiform cartilage, which was very much inflamed and painful. He had been actively purged by medicine taken before my visit.

Ordered an aqueous solution of opium to the ulcer on the chest, an emollient poultice to the wounded toe, and 40 grs. of bromide of potassium every three hours. Upon visiting him the next day, found him lying in bed, which he had not been able to do for several days. There was a relaxation of the rigid muscles, except those of back and abdomen; clonic spasm very feeble; procordial pain gone; had slept three or four hours at a time. He positively refused to continue the bromide, alleging that he had sworn never to take any form of opium, as he had seen one of his countrymen killed by it in a similar disease.

Ordered the nurse to administer the bromide if possible as before. Was called early on the 10th to Mr. D. He had resisted every effort made to give him the remedies, and had grown much worse; the spasms have become excessively severe, recurring every 10 or 15 minutes; muscular rigidity very great; mouth firmly closed, deglutition difficult; skin bathed in profuse perspiration; pulse 110, small and feeble. Gave chloroform by inhalation for immediate relief, which was soon obtained The moment he was able to swallow he took 40 grains of bromide of potassium and was ordered to have it repeated every 2 hours, with brandy toddy ad libitum, and buttermilk, for which he expressed a desire. On my next daily visit, nurse reported that he had to resort to the chloroform at short intervals for four or five hours after my previous visit, when the spasms had gradually ceased in their severity and frequency, and the patient had slept for a considerable time. There was less trismus; deglutition improved, but the tonic contractions continued in most parts of the body. As his bowels have not been moved for several days, enemata were ordered; the bromide was continued with brandy and beef tea.

Subsequent to this date it is useless to note daily changes as there was not much, if any, for five or six days. He had slept a good part of the time; the spasms were very slight and infrequent, he could protrude his tongue from his mouth; but the muscular stiffness still remained in most parts of his body. At the end of that time there was a gradual subsidence of all muscular contraction, by insensible degrees: First, the stiffness of the jaws left; then the cervical muscles relaxed; then of extremities, and

lastly those of back and abdomen. He is now, 28th of June, up and about his room, has some stiffness in back and limbs, with much pain when he attempts to flex them. His appetite is good and he is daily gaining flesh. He has continued the bromide to the present time in 40 grain doses.

In this case no other remedy except the bromide was used. We think it affords us proof of the power of the medicine in controlling this disease, and is another evidence of the safety of the remedy in the largest doses.—Nashville Journal of Medicine and Surgery.

A LARGE ANEURISM OF THE RIGHT SUBCLAVIAN ARTERY, TREATED BY ACUPRESSURE ON THE FIRST STAGE OF THE AXILLARY ARTERY.

Under the care of Mr. PORTER, Senior Surgeon to the Hospital.

Patrick G., aged 43 years, a laborer, was admitted into the Meath Hospital suffering from an aneurism of his right subclavian artery. The disease invaded the three stages of the vessel, and presented a tumour about the size of a large duck-egg above the clavicle, filling up the entire space between his collar-bone and the trapezius muscle. It pulsated strongly, had an elastic feel, and showed signs of thinning at one point. A loud bruit de soufflet was audible in it, extending also to the arch of his aorta. The external jugular vein was much distended above the swelling. He did not suffer from loss of voice or difficulty of breathing. A second aneurism was discovered in his right femoral artery close to, and passing above, Poupart's ligament, towards the external iliac. He had no pain, but complained of numbness in his arm and hand. He appeared to be in excellent health, not in the least degree wasted, and his spirits were good.

He stated that the aneurism had made its appearance fourteen months previously, and had increased gradually in dimensions, until he entered another hospital in March last, where pressure on the tumour was had recourse to. This, he considered, caused the swelling to increase rapidly. As the subclavian aneurism was evidently thinning, and threatening soon to become diffused, or burst externally, Mr. Porter considered his a fair case to give him the chance (although unpromising) of a cure by occluding the artery on the distal side of the tumour. The disease prevented him securing the innominata, or the subclavian, in any of its stages. He therefore decided upon attempting to obliterate the aneurism by placing an acupressure needle under the axilliary artery in its first stage for fifty hours. The general tendency to aneurism in his system induced Mr.

Porter to prefer giving this mode of closing the vessel a trial, instead of throwing a ligature round it, which might, in the first instance, suddenly cut through the artery if diseased, or, when coming away, be followed by fatal hæmorrhage.

June 26th, 1867.—Mr. Porter laid bare the axillary artery in its first stage, after an external incision, four inches in length, extending in a curved direction inwards, from the junction of the deltoid with the greater pectoral muscle, and at a level of half an inch below the clavicle. He then isolated the artery with an aneurism needle, and passed a silver probe slightly bent beneath it, and bridged over the vessel with a loop of wire, after the manner of Sir James Simpson's third mode of acupressure. The tumour immediately became reduced one-third in size, and all pulsation in his brachial, and radial arteries ceased. The patient was then removed to bed, and a small bag of ice applied to the tumour.

28th.—The tumour is reduced very much in size; the pulsation weaker, and the bruit in the aneurism two-thirds shorter. The aortic bruit has almost disappeared.

Half-past three o'clock, P.M.—Mr. Porter removed the probe and wire, not a drop of blood followed.

29th.—The tumour is still smaller, and more firm.

Up to the time of receiving this report, the patient has gone on most favourably.—Dublin Medical Press.

## THE USE OF CALABAR BEAN IN TETANUS.

The following successful treatment of two cases of traumatic tetanus with the Calabar bean are given by Dr. Eben. Watson, of Glasgow, and are interesting as affording some definite information as to the effects of the internal administration of Calabar bean. The following is abstracted from Dr. Watson's paper:

"At half-past two P. M., of the 15th of November, one square of Squire's gelatine paper, containing the extract of Calabar bean, was put on the patient's tongue through the space left by a missing tooth. Shortly after getting it she felt easire, was more cheerful, and kicked up her heels as she lay in bed on her abdomen to show the power she had over them. At three P. M. she got two other squares, at seven P. M., three squares, and at ten P. M. two more. No severe spasms occurred during this evening; she had only a few short starts, but she was always very rigid in both body and limbs, and the opisthotonos and trismus were quite marked. She was more cheerful, however, and spoke more distinctly. Pupils rather contracted. She was to have two squares of Calabar paper every hour during the night.

"16th.—This morning I found her quite rigid, and with frequent and severe spasms. In fact, I thought either that the papers were not sufficiently strong, or that they were loosing their influence on the patient. I now, therefore, ordered the following preparation: Extract of Calabar bean, twelve grains; white wine, one ounce. This made a muddy sort of wine of the Calabar bean, every five drops of which contained about one eighth of a grain of the extract. Such a dose was to be given every half hour, the effects being carefully watched by my assistant. It will be noticed that the doses were given very close together, for we had already learned that their effects were very short lived. The doses were regularly given till seven P. M., by which time she had taken eighty drops, or two grains of the extract. Only momentary twitches had occurred, and these principally when spoken to. At half-past seven P. M. she was in a semi-comatose condition, lying on her back, with no arching, mouth open, pupils pretty well contracted, breathing quiet and regular, pulse rather hurried and full.

"On the 18th she continued better, and the dose was increased to ten drops every hour. Notwithstanding this increase she had three fits on the 19th, when a stronger dose was determined on. For this purpose I ordered the following pills. Extract of Calabar bean, twelve grains; ginger powder of sufficient quantity to make twenty-four pills, one to be taken every hour. By mistake the apothecary made these pills of twice the strength ordered, viz, containing each one grain instead of half a grain of the extract. This was not, however, discovered till the evening, so that the patient took one grain of the extract every hour for eight hours without any particular effect being produced. But half an hour after the ninth had been swallowed, the patient fell into the following states: Her eyes were widely opened, staring and glassy; the pupils were contracted to pin points; the pulse was rapid and intermitting; there was a mucous rattle in the throat, and the breathing was jerky and fitful. Patient did not answer questions, and gave no sign of sensibility. She had no spasms, neither could they be induced. In fact, all the muscles were completely relaxed, except those of the back, which were still rigid. She either could not or would not move any of her limbs, or make voluntary efforts to swallow. Some brandy and water and seven drops of the tineture of belladonna were poured down her throat, she not resisting, and this was repeated in five minutes. No effect was produced on the pupils, but the expression became less violent, could be easily induced; and next morning, at half past eight, I found no traces remaining of the very remarkable state in which she had been on the previous evening.

"It was thought prudent to discontinue giving the bean, until December 6th, when it was recommenced in the form of tincture, made after the recipe of Dr. Frazer,\* who considers five minims to be equal to three grains of the kernel; a dose of five minims of the above tincture was given every two hours, and on the following day, without any aperient medicine having been given her, patient had five large watery evacuations from the bowels. This was the more remarkable, because she had previously required a strong dose of castor oil, often fortified with croton oil, to move the bowels, and except from the effect of such medicine, they had always remained confined I have little doubt, therefore, that this was another of the physiological actions of the bean, viz., catharsis: After this date the recovery was very rapid, and by December 22d she was quite well.

"The second case was that of a boy aged 13. The treatment with the tincture was commenced December 7th, five minims every two hours for two days, with considerable benefit. On the 9th, four minims every hour; but on the 12th there was a return to the first dose of five minims every two hours. On the 14th the dose was again increased to six minims every two hours; but on the 24th there was a great improvement, when he took the dose only three times a day; a few days afterwards he was quite well.—London Lancet.

OPERATION FOR IRREDUCIBLE DISLOCATION OF THE SHOULDER Surgical Clinic of Dr. Gross, Philadelphia.

John Dickinson, æt. 60, laborer. He has had axillary dislocation of the right shoulder since the third of October. There is a marked depression under the acromion process, and the head of the humerus can be felt in the axilla. He can touch the opposite shoulder, but can not carry the hand quite to his head. There have been two attempts at reduction, one by manual efforts and the other by the application of pulleys.

It is now proposed to make a vertical incision two and a half to three inches in extent, through the deltoid muscle down to the bone and capsular ligament, to ascertain where the difficulty in the way of reduction lies. The head of the bone will then be lifted up with an obstetrical instrument and restored to the glenoid cavity. There is no precedent for this operation.

<sup>\*</sup>TINCTURE —Take 1 oz Calabar bean (deprived of husks), macerate with 1 oz. spirit of wine for forty-eight hours; then percolate with spirit of wine, so that the resulting tincture may measure 2 oz.; commencing dose 5 minims. There is also a tincture very generally used, made in the proportion of 2½ oz. of the bean to 20 oz. of spirit of wine.

The patient was placed under the influence of chloroform. The incision was made in the manner described, the capsular ligament divided just sufficiently to enable the fingers to be introduced, and the moment the tension was removed, the head of the bone was restored to its place without any difficulty.

The edges of the wound about four inches in length, were admirably approximated by four long pins, embracing at least three-fourths of an inch of muscle and integument, so that a very strong hold was obtained, In the intervals, collodion strips were applied. The object is, to get, if possible, union by the first intention. The parts will be kept perfectly at rest.

After the operation, the arm could be placed in contact with the side, and the cavity under the acromion process had disappeared.—Philadelphia Medical and Surgical Journal.

CLINICAL REMARKS UPON SURGICAL CASES IN THE BUFFALO GENERAL HOSPITAL—EXSECTION OF HIP-JOINT—EXSECTION OF FIBULA.

By J. F. MINER, M. D. GENTLEMEN.—The first patient which I introduce to you, is the little girl, Mary Frederick, which some of you will remember. About one year since you were present when excision of the head of the femur was made. She was then emaciated to the last extreme, and had been wholly confined to her bed for many months. Her appearance was that of so extreme prostration and debility that the operation was attempted with much misgiving. A longitudinal incision was made about three inches in length, passing directly over the point of the great trochanter: the periosteum was carefully separated from the bone to below the diseased portion, and the head, neck, and trochanters removed. The hemorrhage was exceedingly small, and no ligatures applied. The cavity of the acetabulum was found healthy, but the head of the femur destroyed by the ulcerative processes, which had been actively progressing for two years. The specimen I have preserved with great care, and present it to you; it is a representative one, exceedingly valuable and instructive.

The object this morning is simply to exhibit the diseased bone, and the results which were obtained by the operation, and not to explain its manner or to give other arguments for its justification. Left to themselves, such cases nearly always prove fatal by the slow process of exhaustion and heetic irritation; to obtain, then, any such result as the

one you now observe, is a real triumph of operative surgery. The little girl is restored to health and comfort, to all appearance completely relieved of the disease which seemed certain, if left to itself, to destroy life. The leg is shortened, by removal of the head and trochanters, about two and a half inches, but with the accommodation of the pelvis, common in such cases, this constitutes hardly a perceptible deformity; as you observe she walks nicely without cane or crutch, and with but slight limping.—Buffalo Medical and Surgical Journal.

## ON THE REPORT OF THE VENEREAL COMMISSION.

BY HOLMES COOTE, ESQ., F.R.C.S., SURGEON TO ST. BARTHOLOMEW'S HOSPITAL. Too much publicity cannot be given to the following statement (in which I fully concur) made in the Report of the Venereal Commission: " Hard sores do not necessarily contaminate the constitution; while, on the other hand, constitutional symptoms occasionally follow the presence of a sore, which might have been regarded as a simple local sore by a practised observer." (P. ix.) It follows, then, that, for all practical purposes, the greater part of that which has been written about simple and syphilitic ulcers, about the pathological differences between indurated or infecting and soft or non-infecting ulcers, etc., is nearly useless, and in many points likely to mislead. As stated in the above Report, "too much caution cannot be exercised in giving an opinion as to the future safety of the patient." In short, an ulcer following impure connexion must always be regarded with suspicion by the surgeon; and I could not with certainty and at once name the time when the individual might regard himself as sound, however slight the primary symptom, even though it have been but a so-called excoriation.

The Report proceeds to say (page ix) that "the constitutional manifestations of syphilis follow the primature sore at an uncertain interval of time, ranging from four to ten weeks, the average being about six weeks." But I presume it will not be denied that such manifestations often appear much earlier. I have at the present time under treatment a man who dates the primary sore, the bubo, and the cutaneous eruption, as simultaneous; I think that the average is less than six weeks, and is very often influenced by the habits of the patient and by his general health.

The sense of chilliness, followed by heat of skin, accelerated pulse, and general lassitude, which commonly precede the constitional manifestations of syphilis, are often overlooked among hospital patients. Such persons are not always sensitive to symptoms. But, in private practice,

it is noticed often enough. I have seen some of the best marked cases at the time when the poison was being carried along the line of the absorbents, and through the absorbent glands into the system. Mr. H. Lee inclines to the opinion that "neither experiment nor observation affords any proof that the virus is conveyed unchanged through these glands. All the evidence which we have on this subject," he says, "tends to an opposite conclusion." Hunter himself says: "We never find the lymphatic vessels or glands that are second in order affected. When the disease has been contracted by a sore or cut upon the finger, I have seen the bubo come on a little above the bend of the arm, upon the inside of the biceps muscle; and, in such, where the bubo has come in that part, none have formed in the armpit, which is the most common place for the glands to the affected by absorption." (Holmes's Surgery, vol. I, p. 392.)

I must be pardoned expressing my dissent from the above in the strongest terms; and will mention, in illustration, the following case. A surgeon contracted an ulcer on the forefinger of the left hands. No one could for a time pronounce upon its nature. However, the syphilitic nature at last became apparent. It was quite superficial, circular in form, and without a trace of induration. It secreted a small amount of pus-In the course of three to four weeks, the sore being still open and spreading, chillness and lassitude were felt by the patient. He lost his appetite, looked careworn, and the glands above the elbow on the inner side of the biceps were so tender that he could scarcely bear the pressure of the coat-Two days after this, the axillary absorbent glands became swollen, the general symptoms of chillness being much more severe; and almost immediately afterwards, but without any symptoms referrible to the skin itself, he became covered from head to foot with the mark of syphilitic lepra. So tender were the axillary glands, that he wore the arm in a sling for a period of some weeks.

I cannot say that particular sores are followed by any one special form of cutaneous eruption; the scaly eruption appears to be that most common in a person of otherwise healthy constitution.

The Report admits, without, I think, sufficient proof, a long list of symptoms, indicating, in the severest cases, a persistence and a virulence which might well appal the most stoical of governments. Indeed, those well intentioned persons who oppose the introduction of sanitary measures on this subject, on the ground that those who commit the sin of fornication merit a sharp punishment, would find their most sanguine wishes gratified by the perusal of pages x and xi of this Report. We there learn that its characteristic effects are exhibited in the deeper seated tissues for an indefinite time. Fibro-plastic material is deposited in the various tissues

of the bodies; the liver is more frequently the seat of disease; the brain and its membranes are liable to be affected, giving rise to mania, epilepsy, paralysis, and many other serious and fatal diseases. The lungs are frequently affected; and, finally, "an universal fatty or lardaceous decay of the organs pervades the entire body."

A committee of inquiry is clearly needed to determine the real extent which the effects of constitutional syphilis may attain. Were all that we read true, some well marked deterioration of the race, considering the general prevalence of syphilis, especially in this country, might be fairly expected. The Committee seem to me to have accepted much that should have been referred to further investigation; and this becomes a serious matter when issuing before the profession in the form of an official answer to a Government inquiry.

The same may be said of some of the remarks on hereditary syphilis. Doubtless, it is true, as mentioned in the Report, that "the poison may be latent after the first twelve months, and again exhibit its virulence in growing youth." But I have seen cases of "interstitial keratitis" pronounced syphilitic without one particle of evidence, and so also of other symptoms. Some years ago, the comparatively short stature of the French infantry was referred to hereditary syphilis! also the ingrowing of the finger-nails! Indeed, were the human mind allowed unlicensed freedom in its speculation on these points, it would lead us a pretty dance over the wide field of pathology.

#### ON THE USE OF A SPIDER'S WEB AS A STYPTIC.

On one or two former occasions I have written something on the use of the spider's web as a styptic in cases of excessive homorrhage after extracting a tooth. I now wish to add the result of my experience in another case. I do it with the hope and belief that it may be an essential service to some of my professional brethren, and perhaps to some of their patients. It may be thus serviceable on two accounts. First, it can always be obtained, and everywhere, sometimes when other more popular remedies cannot so readily be obtained; and second because in my hands it has proved efficient where everything else has failed.

About a year ago, a man about eighteen years of age, came to my office to have a lower molar tooth extracted. I examined the tooth, took my forceps and extracted. The operation required rather less force than usual. The tooth came out entire, and clean,

and with no laceration of surrounding parts, except the necessary severing of the periosteum. But from the first blood flowed more freely than usual. I directed my patient to rinse his mouth with cold water, which he did considerably longer than the usual time of the flow of blood in such cases, but with no diminution of its flow. I then applied tannin on pledgets of moistened cotton, filling the socket with them. After repeating this application two or three times, the bleeding ceased, and he left. In about three hours after he returned, bleeding as profusely as ever. I then filled the socket from whence the tooth came with cotton saturated with perchloride of iron. This I repeated several times, with a delay of a few minutes between the applications, without any apparent effect. I next applied the persulphate of iron, full strength in the same manner, and with no better result. Finally, I procured some spider's web, with which I filled the socket, as I had before done with the cotton, when-I need not say that I was gratified to see-the bleeding stopped almost immediately, and there was no recurrence of it-Dental Cosmos

# Medicine.

#### TREATMENT OF BILIARY CALCULUS.

Dr. Lutton, in an article in the Nouveau Dictionnaire de Medecine et de Chirurgie Pratiques, observes that the radical treatment of biliary calculus should be undertaken only in the intervals between the attacks of hepatic colic, otherwise the symptoms which require special management will only become aggravated. He first describes the treatment of biliary calculi, and then that of the symptoms which they produce.

1. As a remedy for the calculi, solvents have been employed. a. Alkaline solvents are much to be preferred to all others; they have produced certain and permanent cures. Sometimes, under their influence, the calculi are broken up or really dissolved, and disappear without leaving any traces; but most usually they are expelled in abundant bilious evacuations. This crisis, preceded often by violent hepatic colic produced by the treatment itself, is not always without danger. The alkaline treatment comprises various medicines, such as the fixed alkalies, salts of soda, carbonate of ammonia, vegetable salts of alkalies, etc.; but the most usual are the waters of Vichy, Vals, Carlsbad, Ems, etc. These waters are used in drinks and as baths; and they must be employed

perseveringly, at different periods, during several years in succession. b. Durande's remedy consists in the administration of half a dracum to a drachm every day of a mixture containing fifteen grammes of sulphuric ether and ten grammes of oil of turpentine. Its use has been attended with success; but, far from this success being due to its solvent action, it is found that, where it has succeeded, the calculi have been expelled without being dissolved; so that this remedy appears only to excite evacuation, and belongs rather to the class of expulsives than of solvents. Chloroform has been much vaunted by some, but its efficacy is very doubtful, and it only calms the pain. c. As a mechanical expulsive agent, purgatives especially should be ordered; frictions, douches, shampooing and electricity have also been employed to favour the expulsion of calculi. Purgatives are preferable to all these, especially sulphate of soda and castor oil. In diet, the patient should use fresh and laxative herbs (such as the cichonaceæ and boraginaceæ), grapes, and fruits, and whey. All fat should be excluded from the food, and the diet should be plain and properly proportioned, consisting of roast or boiled meat, vegetables, farina, lemonade, etc. Exercise is salutary, but its object here is less to complete the combustion of fat than to favor the escape of the bile into the intestine, and to prevent it from accumulating in the gallbladder.

2. In the treatment of the symptoms of biliary colic, we should specially seek to assuage the pain. Opium may be given without fear, even in doses of fifteen or twenty centigrammes (two and one third or three grains); but subcutaneous injection of hydrochlorate of morphia is preferable. Belladonna, praised by Bretonneau and Lalotte, is not so good as opium, and should only be used when this fails. The same remark is applicable to cherry laurel water and to tincture of castoreum. Chloroform administered by inhalation until anæsthesia is produced is a valuable remedy when paroxysms are most violent; it not only calms pain, but may lead to the cessation of the spasmodic contraction of the biliary passages, and thus favor the expulsion of the calculus.—Gazette Med. de Paris, April 14, 1867.

## ON A CASE OF BROMINE POISONING.

By SAMUEL P. DUFFIELD, PH. D.

On the 10th March I ordered C. W., an employee in the laboratory, to prepare some bromide of ammonium. The process given was that of Wittstein, which consists in first forming a solution of bromide of iron, under water in a large glass balloon by the reaction of bromine upon

iron turnings, and then decomposing the bromide of iron by liquor ammonia, filtering and evaporating to crystallization. Notwithstanding having cautioned him about inhaling the vapor, he carelessly poured rapidly into the large glass, three pounds of bromine, which evolved vapor to quite a dangerous extent, and which he inhaled.

I was first aware of the fact by one of the workmen running to me and saying "Carl is dying." On coming to the patient I found him perfectly asphyxiated, not able to give me any intelligence as to what was the cause, but on entering the furnace room, I perceived the fumes of bromine, and, of course, realized what the true state of affairs was.

The corrosive action of the bromine was such that the glottis had closed with a spasm, and did not seem to be willing to yield. I tried ammonia vapor, but as he could not breathe, it was of no avail. I drew out the tongue, and the air would fairly whistle through the glottis, and then the spasm would shut it down tight again. For a few seconds I was unable to devise a plan, but finally based my plan upon the chemical fact that bromine, like chlorine, acts by its absorption of water from the tissues, and I thought if I could again moisten the bronchi that I might possibly save him. Having brought him near to a flexible steam pipe we use for boiling, I made them hold the mouth open, and threw the steam from some distance, so as not to burn him, into his mouth and over his face. It had the effect. The spasm relaxed, and he was subsequently treated with ammonia vapor, and sent home to keep company with the tea-kettle. He assured me that until twelve o'clock that night he did not dare leave the tea-kettle for two minutes. The subsequent inflammatory action was easily controlled. What I wish to particularly call the attention of the profession to, is the great value of steam vapor in cases poisoned by corrosive vapors. Ammonia can be also used by saturating a handkerchief with a weak solution, and allowing the steam to blow through it. On referring, after the danger of the case was over, to works on the subject, I find neither Beck nor Taylor speak of bromine. While they recognize the compounds of this halogen with others, they do not speak of its peculiar poisonous effect or its mode of treatment. Of course, when a corrosive poison has been swallowed the treatment is entirely different.—Detroit Review of Med. and Pharmacy.

## SUPRA-ORBITAL NEURALGIA.

## By A. D. WILLIAMS, M. D., Cincinnati.

Neuralgia of the nerve emerging from the supra-orbital foramen is not uncommon; particularly in regions where chills and fevers prevail. The pain is sometimes mild, but more frequently its severity is really excru-

ciating. No one can form even a slight idea of its intensity, who has not seen others suffer from it, or who has not felt in his own person its penetrating darts and aching heaviness. Where suffering is so acute and frequent, its proper treatment becomes a matter of grave importance. But first a correct diagnosis is to be made. This is generally quite easy in supra-orbital neuralgia. The pains begin at the point where the nerve comes out and radiate in different directions over the forehead and temple, according to the distribution of the nervous filiments to these parts.

Sometimes they extend over the whole head, very much similating general headache; particularly is this the case when both supra-orbital nerves are involved at the same time. The fact that the pains run the course of the trunk, and ramifications of these nerves unmistakably indicate that neuralgia of said nerves is the immediate cause of the suffering. Another diagnostic symptom is the tenderness felt upon pressure over the track and branches of the nerve. It is true, however, that the scalp will feel sore or tender after severe cephalic pains of any kind, but after supra-orbital neuralgia this tenderness is confined mainly to the body and branches of the nerves, and after general headache it is extended more or less over the whole surface of the scalp. Pains very similar to neuralgia may come from inflammatory disease of the eye, but it is hardly probable that any one would mistake the pains of an iritis or keratitis for neuralgia of the frontal nerve. They may resemble each other very much, but we always have the inflamed or non-inflamed eye to help us out in the diagnosis. As to the cause but little need be said. It is generally malarious or periodical and hence occurs mostly in malarious districts.

The treatment divides itself into two heads, palliative and radical. The paroxyms of pain are sometimes so intense that something must be done for immediate relief to the sufferer. For this purpose the best remedy I have ever had any experience with is volatile liniment or spirits of ammonia, the preference always being given to the former as it is the milder.

A soft linen cloth is folded four or five times, so as to be about the size of the palm of the hand, and should be a little longer one way than the other. A few drops of the liniment are dropped upon the compress and spread over its surface. (Four or five drops are enough to use at once). It is then pressed with the hand firmly upon the forehead, just above the eye-brows, and held there from one to two minutes; or until the skin turns red beneath it, which will be very soon after its application. Just here be it observed that considerable care is necessary, else a large blister will be raised over the brow by the surprisingly rapid action of volatile liniment and particularly if spirits of ammonia are used.

So far as pain is concerned, the effect of this application is nearly instantaneous. The patient will almost invariably express himself as greatly relieved, even before the cloth is removed, and particularly if he has been suffering severely. And as a rule it will not return at least for several hours and sometimes not at all. So then the palliative treatment not only relieves suffering, but gives us an intermission of pain and a very favorable opportunity to institute the necessary treatment for the radical cure. This consists of from three to five pretty large doses of quinine (about 5 grs. each) given for instance morning and evening. Better give the first dose immediately after this local treatment, and then repeat every twelve hours afterward, until the necessary quantity is taken. Three doses will usually suffice. This treatment, it will be observed, is in harmony with the supposed cause of the disease—malaria.

While I was in the army of West Virginia I had an opportunity to see and treat a great deal of this kind of neuralgia. I always treated it as above indicated and have every reason to be satisfied with the results. I remember no case that stubbornly resisted this mode of treatment. The idea of the *palliative* part I got from Dr. G. S. Shaw, of West Virginia, who was my regimental surgeon at that time.

Lately I have treated in the same way a delicate, sickly woman from southern Indiana, and with good success. After she returned home, she wrote to know the name of the liniment used, that she might get a supply, and have it on hand for an emergency. She has hitherto frequently suffered severely from such neuralgic attacks, and naturally enough expects them again.

I do not mean to say that this treatment will cure all cases of supraorbital pains, but believe it is the very best treatment for *simple* neuralgia of the forehead.—Cincinnatti Journal of Medicine.

## DIPHTHERIA AND CROUP; DIFFERENTIAL DIAGNOSIS.

(From Dr. Gaillard's Prize Essay on Diptheria.)

Diphtheria.

Croup.

Disease of the blood; a toxæmia; a constitutional disease, with local manifestations.

Blood primarily affected; sometimes there are no local manifestations.

First exhibits itself in the fauces, locally.

Not a disease of the blood; a local disease, with constitutional manifestations.

Blood, if at all, affected secondarily; local manifestations invariable.

Locally, first exhibits itself in the trachea.

Commences always above the rima glottidis.

Does not extend below the rima glottidis, unless complicated with croup.

Asthenic disease; constitutional symptoms primary; local symptoms secondary.

Depression often manifested without dyspnœa.

Contagious.

Not peculiar to any age.

Respiration not affected, unless the disease extends downwards; dyspnœa not a prominent symptom.

No cough, unless croup supervenes.

The membranous exudation of fibrin always commences above the rima glottidis.

Exudation only extends below as a complication.

Occasionally there is a cutaneous eruption.

Epidemic chiefly, and seldom sporadic.

Swelling of the lymphatic glands behind the jaw frequently occurs.

Duration, one to three weeks, with sequelæ.

Exudation fibrinous.

Dyspnœa rare, and when present, uniform.

Dyspnæa not produced or increased by deglutition.

Invades at all hours.

Not caused by cold or dampness.

Prognosis grave; mortality severe.

Commences always below the rima glottidis.

Never extends above the rima glottidis.

Sthenic disease; local symptoms primary, and constitutional symptoms secondary.

Depression not often manifested before dyspnæa.

Not contagious.

Peculiar to infancy and childhood. Impaired and difficult respiration always a prominent symptom; often the chief symptom.

Cough almost invariably present.

The membranous exudation of albumen always commences below the rima glottidis.

Exudation never extends above.

There is never a cutaneous eruption.

Sporadic and never epidemic.

Swelling of the lymhatic glands behind the jaw never occurs.

Duration never beyond the 11th day (Cragie); no sequelæ.

Exudation albuminous.

Dyspnœa common and invariably spasmodic.

Dyspnæa frequently caused and increased by deglutition.

Invades chiefly at night.

Generally caused by cold and dampness.

Prognosis generally good; mortality slight. Antiphlogistic treatment injurious.

Tracheotomy contra-indicated and generally forbidden; no constitutional resiliency.

Sequelæ — paralysis, strabismus, amaurosis, &c.

Fœtor of the breath constant and great.

"Dissolution of the blood;" loss of its coagulating power.

Constitutional symptoms precede the local.

Membranous exudation always present (as a rule) and always seen; present as the rule.

Exudation thick, buff colored; coriaceous.

Membrane renewed as the rule.

Death, when disease is uncomplicated, from asthenia.

Sound of the cough moist and sonorous.

Convalescence slow, unreliable, and complicated with the sequelæ of the disease; interrupted.

Antiphlogistic treatment curative.

Tracheotomy indicated and advised; constitutional resiliency very decided.

No sequelæ.

Fœtor of the breath generally absent.

"Dissolution of the blood" never seen; increase of its coagulating power.

Local symptoms precede the constitutional.

Membranous exudation seldom present and never seen: present as the exception.

Exudation thin; not buff colored; not coriaceous.

Membrane renewed as the exception.

Death from apnœa.

Sound of the cough sonorous and metallic.

Convalescence easy and uniform; no sequelæ; uninterrupted.

NOTES ON TÆNIA MEDIOCANELLATA (OF KUCHENMEISTER), OR T. INERMIS, BEING ITS FIRST RECORDED OCCURRENCE IN IRELAND.

By Dr. W. Frazer, M. R. I. A., Honorary Member Medical Chirurgical Society of Montreal, etc.

(Read before the Natural History Society of Ireland.)

Tape-worm cannot be considered a common affection in Dublin, nor does it seem very prevalent in any part of Ireland. From patients seen in private practice, I have seldom obtained more than three to six specimens each year on an average, though sometimes two or three of these cases will present themselves in rapid succession. The subject of entozoa having recently attracted more of my attention than usual, I became

convinced, from investigating the history and symptoms complained of by those individuals I had seen, that there were in Ireland at least two distinct varieties of tape-worm, which I had before always confounded together, and failed to determine their specific characters with that strict carefulness the question demanded, and there were grounds for concluding these would prove to be the common T. solium, and its more formidable relation, T. mediocanellata, a correct description of which we owe to Kuchenmeister. My surmises respecting the latter worm received ample confirmation a few days since, by a gentleman bringing me the specimen now recorded, which, so far as I can ascertain, is the first recognized example of T. mediocanellata of indigenous origin.

The host of this parasite, a gentleman in the prime of life, of robust frame, in perfect health and good condition, consulted me for an eruption of isolated patches of psoriasis scattered over his limbs and body. He also stated that for at least fourteen years past, and possibly for a longer period, he was infested with tape-worm. Its presence caused him great annovance, as the mature isolated joints of the animal passed from him at irregular intervals, with or without alvine dejections, several of them in succession escaping whilst he was walking about his occupations, or when warm in bed. He had endeavored to get rid of his unwelcome guest by using the ordinary round of vermifuges, and related his experience with Kesso and Kamela. He preferred the Kamela, its dose being smaller and therefore easier taken, and it had the advantage of being tasteless; he also thought it more effectual, for he succeeded by its means in removing (besides a few small detached fragments) one continuous mass of adhering joints, fifteen feet in length, which he measured after its expulsion, whilst still alive and in motion.

He was anxious to have his pest thoroughly expelled, and volunteered, with this design, to carry out any reasonable directions. I recommended him to take early in the morning a full dose of castor-oil, and use for that day soft food and soup, &c., to expose the animal more completely to the action of the special vermifuge selected. This consisted of ethereal extract of male fern, which he took, fasting next morning, made into emulsion with yolk of egg, and flavoured with essence of peppermint. It operated briskly, and expelled quite dead, a good specimen of T. mediocanellata, which measured seven feet in length in one unbroken piece, in addition to some small segments and detached joints belonging to the upper portion of the animal. The head was not obtained, it seldom comes away with the joints after medical treatment, at least far less often than is supposed. As these creatures contract in size considerably after death, its length when living must have reached eight or perhaps nine feet.

The constitutional symptoms caused by this worm were obscure and insufficient to diagnose its existence, which was best recognized through the constant expulsion of its joints. Close enquiry elicited from the patient that his appetite was irregular, and at times craving, that he felt uneasiness and unpleasant sensations in his left hypochondriac region, and, though more seldom, some pains were experienced in the region of the heart, and extending down the left arm.

The proglottides at the upper portion of the animal are considerably broader than long, the transverse exceeding the longitudinal measurement by at least five or six times. Seventeen of these adhering segments occupy a space of one inch. They are easily detached from each other, possessing slight cohesion when compared with the more developed and larger joints. About eight inches lower down fourteen segments were contained within the inch. After this they rapidly became elongated, and assumed the ordinary appearance of common tape-worm, but the ultimate large segments each reached the bulk of 6-10ths of an inch. This striking resemblance of the upper joints of T. mediocanellata to the broad, shallow joints of the rare Bothriocephalus or Russian tapeworm, is a distinctive character of the animal. They are easily separated by observing the different position of the sexual aperture, which is lateral in the Toeniæ, and median in Bothriocephalus.

To sum up the principal distinctions which separate the two tapeworms found in these countries, the following brief particulars will suffice:—

1st. T. mediocanellata is a larger animal, it acquires greater length, is thicker, and its segments broader than the T. solium. According to Kuchenmeister, when mature, its average length is at least double that of the latter.

2nd. The proglottides are reproduced with great rapidity, and are remarkable for the freedom with which they escape from the patient: "proglottides permangæ et pervivaces, sæpissime sponte et sine fæcibus humanis ex ano demissæ."

3rd. Its head which, as already mentioned, is seldom obtained by medical treatment, is "unarmed." It presents no ring of hooklets, is destitute of rostellum, and studded by four conspicuous dark coloured suctional disks or acetabula.

4th. The sexual apertures, which are disposed in T. solium with considerable regularity on alternate sides of the successive joints, are distributed in mediocanellata with exceptional irregularity of arrangement, though always opening on the lateral aspect; they are conspicuous apertures that lead to a complicated, much branched, and peculiarly arranged

sexual system. The trivial name of the entozoon is derived from a median thick walled canal or tube, which Kuchenmeister considers continuous, extending from joint to joint.

Experiments carried on by Leuckart, and repeated by Meisner and others, have traced the development of this cestoid animal with much success. When calves are fed with mature joints they soon suffer from severe febrile symptoms, and other evidences of acute disease; after a short time their muscles are found permeated by innumerable minute hydatid cysts, each containing within its cavity heads of cysticerci, resembling in every particular those of the mature worm. Leuckart failed in inoculating the sheep or the pig, and other observers have confirmed his statements.

Professor Aitkin at Netley, obtained several specimens of this tapeworm from soldiers, principally from men who had returned from serving at the Cape of Good Hope, and Professor Cobbold remarks in his work on Entozoa that he was surprised on looking over the collection of tape-worms at Middlesex hospital to find at least half their number referable to this species. I believe it will be found equally common in Ireland, with the ordinary tænia solium, though the present instance is the first I am acquainted with in which its characters were recognised, and its claims advocated to be considered a member of our indigenous fauna.—Dublin Medical Press.

PSEUDO-HELMINTHOLOGY: OBSERVATIONS ON CERTAIN SUBSTANCES LIABLE TO BE MISTAKEN FOR INTESTINAL WORMS.

By Dr. Wm. Frazer, M.R.I.A. Honorary Member of the Medico-Chirurgical Society of Montreal, etc.

Cells of Orange Pulp mistaken for Entozoa and for Hydatids.— Three examples of this curious mistake have occurred to me. The first was referred for investigation some years ago from the north of Ireland by a physician who wished to ascertain whether the strange substances his patient had passed from his bowels were hydatids, as their appearance had given rise to much uneasiness. When informed of their nature his reply was, "I beg to thank you for your kindness in examining the supposed hydatids, the patient has been using oranges, and you are perfectly correct."

The second was submitted to me by Dr. Austen. A delicate child had got an active vermifuge under the idea of worms being the cause of her ill health, and undigested cells of orange pulp were discovered in the alvine discharges, these were alleged to be genuine intestinal worms, but

doubts having risen about these supposed ascarides, he wished to have them examined. Dr. Austen's own impressions were opposed to their being worms, and his note in reply to my letter was, "You are perfectly correct as to the supposed worms, the child had eaten an orange or two for several days consecutively, the matter is really rather ludicrous."

In the third instance, a young gentleman of delicate appearance was brought me by Dr Kirwan; he displayed some substances floating in a phial of water, which he had picked out of the evacuations, and believed he saw them distinctly moving; they were cell walls of orange pulp, the contents being quite digested. When told what they were, he admitted that he had eaten the fruit. He was suffering from impaired digestion, and complained of irregular action of the bowels.

Undigested Celery mistaken for Ascarides.—Some years since a gentleman brought me several long undigested fragments of celery stalk, chiefly consisting of the stringy vascular tissue, which he fancied were worms, he had seen some ascarides lumbricoides passed by a child, and was convinced he was infested by them. The microscope showed their vegetable nature and rendered their recognition easy. It is not unusual for persons who have feeble digestion to excrete unaltered vegetable substances consisting of indurated vascular tissues or of sclerogen, and even the cellular portion of vegetables may pass off undigested, and it must be admitted in excuse for this patient's error, that the fragments of celery he mistook for entoza were not unlike semi-digested ascarides.

Plastic lymphy intestinal exudation mistaken for Tape-worm.—In this distressing case a physician of great promise was attacked with plastic lymphy exudation of the intestines; he had suffered from griping abdominal pains and a train of nervous symptoms, when some fragments of lymphy matter being expelled, he was supposed to have tape-worm and advised to use drastic purgatives and anthelmintics; these had the immediate effect of aggravating his symptoms, severely injuring him and increasing the number and size of the expelled masses. The specimens that I examined were of pure white colour, seldom exceeding half an inch in length and of irregular shape, consisting of granular substance which passed into fibrillation on the surface that appeared to have been attached to the intestine. The lymphy fragments continued to form at intervals for several weeks until he left Ireland for a protracted sea voyage, and soon after his departure he ceased to pass these plastic masses.

Larvæ of Diptera supposed to be Worms.—In two instances, of which I have preserved no notes, dead larvæ of some fly were brought to me under the idea of their being intestinal worms. They were stated to have

passed from the bowels, which was possible, though their presence might admit of other explanations.

Elastic-ligamentous Tissue supposed to be Tape-worm.—Some years ago a woman in the wards of the Hardwicke Hospital, under the charge of Sir D. J. Corrigan, fancied she was attacked with tape-worms, the alleged worms were submitted to me for microscopic examination. They proved to be a quantity of fragments of ligamentum nuchæ which she had eaten weeks previously, they lodged in the cœcum, causing distinct fulness in that region, and required repeated purging for their expulsion. This case was recorded by Sir. D. J. Corrigan in one of the early numbers of the Dublin Hospital Gazette, and affords a good illustration of the value of microscopic examination in determining the nature of doubtful substances.—Dublin Medical Press.

# INCONTINENCE OF URINE SUCCESSFULLY TREATED BY EXTRACT OF BELLADONNA.

A healthy looking country girl, fourteen years old, was brought by her mother to the Metropolitan Free Hospital on the 11th of January last. She had suffered from nocturnal incontinence of urine for the last two years. Not a night passed without her wetting the bed, and to such an extent that she had been compelled to lie upon straw covered with a sheet in order to change her bedding daily. She had been taken out of bed at night, scolded and ridiculed without any effect in making her abandon the habit. Dr. Drysdale ordered her to take a quarter of a grain of extract of belladonna as a pill, to be taken at bedtime every night. On the 15th of January her mother came to say that she had not wetted her bed since taking the medicine. Up to the 18th of January there was no return of incontinence of urine. Dr. Drysdale remarked that he had in many cases seen similar results from the use of belladonna in this disease, and supposed the drug acted by paralyzing the detrusor urinæ muscle.—London Lancet.

#### TREATMENT OF PERTUSSIS.

From the reports of the treatment of this disease in four large London hospitals, published in the London Lancet of April 23, 1867, we derive the following conclusions, the more valuable as the experiences of all the surgeons of these hospitals coincide in the most important particulars.

The majority of the cases treated were first seen when the disease had already existed for from one to three weeks, and was generally complicated, more or less, with bronchial catarrh. Nearly all the remedies vaunted as specifics were tried faithfully without establishing their efficacy, having been found not to exert any great power upon the disease, either by cutting it short or rendering the attack milder. Antimonials, mercurials and other antiphlogistics were found to exert a decidedly unfavorable influence, while, on the other hand, especially in debilitated children, quinine and ether were found to be productive of marked benefit. bromides of potassium and ammonium were found to be useful in those cases in which the paroxysms were frequent, and also in these in which the symptoms indicated nervous complications, such as convulsions, muscular contractions, night tremors, etc., etc. Small doses of hydrocyanic acid were generally found possessed of a calmative effect, and seemed to be more efficacious than any other internal remedy. Counter irritation (the linimentum chloroformi being chiefly used, applied by rubbing upon the back and chest night and morning) proved of as much if not of more value than any other method of treatment. Small doses of morphia were used by Dr. Gervis, of the London Hospital, frequently in cases of convulsion, and always with marked benefit, allaying both the pulmonary and cerebral disturbance. Complications of pneumonia and pleuritis were treated entirely by nourishing diet and stimulants. Chloroform by inhalation was found often to relieve the paroxysm of coughing.

# Materia Medica and Chemistry.

PHYSIOLOGICAL AND THERAPEUTICAL ACTION OF COD LIVER OIL.

Taken from E. Fougera's Circular, and the Medical and Surgical Reporter, Philadelphia. Copyright secured. Entered according to Act of Congress, in the year 1867, by E. Fougera, in the Clerk's Office of the District Court for the Southern District of New York.

"The minute division of the Iodine in Cod Liver Oil, the particular state in which it exists, must singularly facilitate its absorption by the tissues, and can in this way contribute more than the absolute proportion of this substance to the marked effects which this oil exerts on the animal economy.

"Also Iodine in the oil is not eliminated from the system, as the other so-LUBLE PREPARATIONS OF IODINE; in this elementary combination its action is slower, more regular, and more persistent, as it is successively set at liberty in the economy, in proportion as Cod Liver Oil is gradually decomposed in the blood.

Professor of Hygien, at the Academy of Medicine, Paris.
"[Manuel de Matière Medicale, pag. 749-1856.

The action of Cod Liver Oil on the system is a double one; it is nourishing by its fatty elements, and curative by its medicinal bodies—Iodine, Bromine and Phosphorus, which it naturally contains; and to these three substances must be attributed its superiority over other fats or oils, either animal or vegetable, in the cure of diseases. These facts, discovered and proven by physiologists in their experiments on animals, and confirmed by the experience of physicians in their daily practice, have been corroborated during the last eight years, in a most illustrative manner, by the administration, to a large number of patients, of a Cod Liver Oil five times richer in Iodine, Bromine and Phosphorus than any of the Cod Liver Oils known before.

Cod Liver Oil, as well as other fatty substances, when taken in too large quantities, is apt to disturb the stomach, and derange the functions of the intestinal canal. Only a small quantity can be digested and assimilated, the rest passing off unchanged, producing more or less frequent and abundant alvine evacuations, in which are contained the superfluous oils or fats. Observations prove that the gastric juice has no action whatever on fats or oils, the pancreatic juice being the only body which, by its emulsive properties, causes the absorption of these substances into the economy; and, therefore, all the oil not emulsioned by the pancreatic juice is evacuated by the intestines just as it was taken. The knowledge of this important fact is due to the recent observations of Claude Bernard, a well known authority in physiology. The oil, once emulsioned by the action of the pancreatic juice, is brought into the general current of the circulation as follows: It is first taken up by the chyliferous vessels on the surface of the small intestines, and passing through the mesenteric glands and the thoracic duct, it is discharged into the left subclavian vein, where it mixes with the venous blood returning to the right cavities of the heart. This blood, and the fresh nutritious elements, furnished by the two subclavian veins, are pressed into the lungs to be there oxidized and altered; while passing through the pulmonary circulation, the oily molecules are modified, and almost all of them destroyed. The blood, then, ready anew for nutrition, passes into the left ventricle, to be thence distributed through the arterial system, carrying along with it some oily globules left undecomposed during their speedy passage through the lungs, said oily globules being afterward successively altered in the circulating blood.

The medicinal oil, evidently brought undecomposed into the lungs and partly into the general current of the circulation, is there modified, losing not only its emulsive form, but also its oleagineous characteristics, so as to constitute a part of the arterial blood. Iodine, Bromine and Phosphorus are then set free, during the process of nutrition of the tissues each part of our system appropriating to itself the substance it needs.

The tissues, in contact with the nutritious blood, having a tendency to appropriate to themselves the elements most proper to maintain their healthy condition, or to alter it when unhealthy, is it not judicious to conclude that the lungs first and then the rest of the system, when affected with Bronchitis, Phthisis, Scrofula, under any variety, or Rickets, etc., etc., are highly benefited by the healing and restorative action of the oil and its medicinal constituents, minutely, naturally and persistently brought in contact with the diseased parts?

That oils and fats are successively carried through the economy and transformed, as above described, is amply demonstrated by the experiments of the most eminent modern Physiologists, such as Claude Bernard, Tiedemann and Gmelin, Leuret and Lassaigne, Landras, Bouchardat, Blondlot, Delafond, Gruby, L. Corvisart, J. C. Dalton, Jr., A. Flint, R. Dunglison, etc.

We must not forget this important point, that oils or fats go into the blood undecomposed and unchanged, being merely infinitisimally divided by the pancreatic juice; but if an oil contain substances, in a close chemical combination, so that they cannot be easily separated, these substances will, of course, be carried into the blood with the oil itself. This is just the case with Fougera's Cod Liver Oil, which contains a large proportion of Iodine, Bromine and Phosphorus. Iodine and Bromine have so strong an affinity for oil, that they cannot be separated from it by chemical reagents, not even by strong sulphuric acid. They must, therefore, be carried with the blood and liberated when the oil is transformed, in the process of nutrition, into its elements, and becomes the chief agent by which the heat of the body is maintained. Knowing. then, that to the nutritive property of the oil is superadded the alterative, fluidifying and stimulating power of a comparatively large quantity of Iodine, Bromine and Phosphorus, who can doubt the efficacy, as a medicine, of this new Cod Liver Oil?

Phosphorus, a part of our brain and bones, is a powerful diffusible stimulant, exciting the nervous organs, heightening the muscular power and mental activity, and relieving the despondency of mind occasioned by many serious diseases.

Iodine and Bromine are superior alteratives for improving and purifying the depraced nature of the blood. They are the best remedies we possess for checking and controlling the swelling and induration of the glandular system, the ulcerative process in scrofulous complaints, the diseases of the lungs, etc. Obviously the main point in such scrious affections is to check and control at once the ulcerative process, and to do so it is of the greatest importance to use PROMPT AND ACTIVE MEDICATION.

Superiority of Fougera's Cod Liver Oil over Simple Cod Liver Oil.—Until of late, natural and pure Cod Liver Oil has been the best remedy, and the one most generally used, with more or less success, in diseases of the lungs, when of a tuberculous character. The period of the malady, when the oil was first employed, and also the purity and strength of the remedy, accounting for the success or failure.

Pure Cod Liver Oil is more likely to cure Consumption, Scrofula, Rickets, Swelling of the Glands, &c., in the first stage of the disease; in the second and third stages it mitigates the severity of the symptoms and prolongs the life of the patient, but seldom saves it.

The reason for this difference of action is simply, that the pure oil contains iodine, bromine and phosphorus only in minute quantities, which although sufficient to cure a disease in the beginning, is not powerful enough when it assumes a graver type.

If we suppose for an instant the discovery of a new, natural cod liver oil, containing more iodine, bromine and phosphorus than the oil in present use, there is not the least doubt but that every physician would prescribe it in preference, fully confident of its enhanced qualities. The natural consequence of this proposition explains satisfactorily why the medical profession should give, and do rightly give, the preference to Fougera's Compound Iodinized Cod Liver Oil, which contains a larger proportion of Iodine, Bromine and Phosphorus than the oil in present use; these active elements, as before remarked, are in such a peculiar combination that their action is slow, regular and persistent, being successively set at liberty in the economy, in proportion as the oil is decomposed in the process of animal life.

Some physicians are so well convinced that the curative properties of the oil reside in these three substances, that to obtain a full effect, they prescribe very large doses of the oil, sometimes giving two, three, and even four tablespoonsful, three or four times a day, the larger quantity amounting to no less than half a pint daily. That their object is not attained is fully proven by physiologists, who have demonstrated that only the quantity of oil, emulsionized by the pancreatic juice is digested

and carried into the blood, the rest being lost and passed off nearly as taken.

Being deeply impressed with the above physiological and chemical facts, Mr. Fougera instituted experiments, and, after many trials, has succeeded (1858) in preparing a Compound Iodinized Cod Liver Oil; which is simply the best Newfoundland Cod Liver Oil, combined with four times as much of iodine, bromine and phosphorus as it naturally contains.

Pure Cod Liver Oil varies considerably in composition, as may be seen by comparing the different analysis published in works of chemistry and materia medica. A quart contains one to four grains of iodine, one-eight to three quarters of a grain of bromine, one-quarter to one-half of a grain of phosphorus. In 1860 Mr. Fougera published in the Repertorie de Pharmacie, edited by Professor Bouchardat, at Paris, the formula of his oil, which contains, per quart, in addition to the above quantities;

Iodine, 16 grains, Bromine, 2 grains, Phosphorus, 2 grains.

The combination is made so that the odor, taste and color of the natural oil are preserved.

Fougera's preparation being consequently five times more active than the richest commercial Cod Liver Oil, will tend to restore health by its curative action thus enhanced, in a much shorter time than the simple kind, and attains the desired effect where the other will fail.

The dose of this oil is only a tablespoonful for adults, and a dessert or teaspoonful for children, according to age, three times daily; it may be administered at any hour, but it is preferable to select the times of meals, since we know that the pancreatic secretion manifests itself only during the stomachal digestion, to act immediately on the alimentary principles as soon as they pass from the stomach into the intestines. Though the quantity of iodine is very small in each dose, it acts nevertheless with greater efficacy than a larger quantity of any of the iodides, for the reason stated by Professor Bouchardat and others, that iodine in Cod Liver Oil is not eliminated from the system as the other soluble preparations of iodine, but is successively deposited in the economy as the oil is gradually decomposed in the blood.

When iron is required with the oil, Fougera's Dragees or Syrup of Pyrophosphate of Iron will be found the most agreeable and active adjuvant. It is best for children and delicate persons to take the Syrup of Iron immediately after the oil.

# Canada Medical Journal.

MONTREAL, AUGUST, 1867.

### CANADIAN MEDICAL SOCIETY.

In the last number of the journal, we published what appears at first sight to be the resolutions of a society bearing the above designation,—but we must correct the error. However desirable it may be to form a society with the objects and intentions of similarly constituted bodies in other countries, we have to inform our readers, that in Canada such a society is yet in the womb of time. Whether it will be stifled at its birth, and come to nothing, passing into the shades of futurity, we are unable to prophesy. But we should imagine that if "The Canadian Medical Society," ushers in its being with a roll of such resolutions as those proposed by the Quebec Medical Society, it will never be formed. It is in every way desirable that a uniform system of granting licenses to practice Medicine, Surgery, and Midwifery throughout the Dominion, should be inaugurated, but we do not see the necessity of degrading the already high standard of our University degrees.

Medical education in Canada has been fostered and exalted by our Universities. When we look back at the times that are past, and reflect on the method of examination which was the rule before the establishing of our University and School system, we cannot but accord to those bodies their meed of praise. The time was when men could go up for examination before the old Medical Board without having ever attended a single lecture on any medical subject. In 1847, in Lower Canada, the profession sought and obtained from the Legislature an Act of Incorporation; by the provisions of that Act, all persons who were desirous of obtaining a license to practise Medicine, Surgery, and Midwifery in Eastern Canada were obliged to produce to the Medical Board, (under the title of the College of Physicians and Surgeons), satisfactory evidence of their having attended a full curriculum of studies extending over four years. The holders of diplomas of Universities and Colleges in Her Majesty's dominions, at which a full curriculum of study was pursued were admitted to practice without further examination. Tempora mutantur et nos muta-

mur in illis is with us fully illustrated, at the meeting of the College of Physicians and Surgeons held in this city in May last, no student presented himself for final examination, and why? Because the Legislature having increased the number of our Universities, many of the young men who would have presented themselves for examination before the board of the College, preferred seeking higher qualifications, and obtained University degrees. So that the College of Physicians and Surgeons found themselves resolved into a body without occupation, except that of enregistering the names of applicants for license, who presented University diplomas, and also of examining persons in classics and other branches in preliminary education, who were about to commence the study of medicine. is a simple statement of facts. With a view of affording occupation in the examination way to those Governors of the College of Physicians and Surgeons who are unconnected with any University, it is sought to degrade the Universities, Colleges and Schools of Medicine, both at home and abroad, by declaring that their degrees and diplomas, shall, in future, have merely an honorary value, and that all persons, holders of degrees in Medicine, or diplomas in Surgery or Midwifery, desirous of practising their art in the Dominion of Canada, shall appear for examination before a Central Board of Examiners in each Province. As we before said the times have changed, the system as at present has become cumbersome and unwieldy. It appears to us that what we do require is a Council of Medical education and Registration, similar to that which exists in Great Britain. The registration of diplomas and degrees can be effected with little trouble and less expense than at present, at the same time the Registrar can issue a certificate of enregistration equivalent to a license which gives to the holder the right of entering a court of law and prosecuting a delinquent patient who refuses to satisfy a just claim for professional services rendered.

It does appear that this is all we need for the Dominion of Canada, and this system we would like to see generally adopted. As regards the Universities and Schools, let there be amongst them honourable rivalry such as you expect to meet with among men who devote themselves exclusively to the cultivation and advancement of their noble calling, and we will venture to prophesy, that those schools at which the operations of nature and practical utility of art are faithfully and earnestly taught, will acquire the confidence and support of the public.

Coming back to the "Canadian Medical Society," we will go into the movement heart and soul, but at the same time, trust that the subjects brought before the meeting will be of far higher consideration than the best method of throwing open our doors to those desirous of following

honourably their calling in life. Our journal has passed through three years of a struggle for literary existence, and when we look at the list of contributors during the past year, we cannot but feel surprised that so few members of the profession have taken the trouble to note the results of their observations. At least in saying this, we must qualify our meaning, for we do believe there are many sincere and patient workers, but it is to be regretted that they hide their light under a bushel. We would be rejoiced to see the Canadian Medical Society rival the British Medical Society in their workers, so that the Society of the Dominion of Canada, might, as we trust it will, take that honourable stand in the literary world, which its number and authority should fully warrant. We look forward with sincere interest to the coming meeting, and trust, there will be at that meeting an inauguration of a state of things which will gain for us as a profession, that respect from outsiders which is at the present day lamentably wanting.

#### LIFE ASSURANCE COMPANIES.

During the past year, several American Life Assurance Companies have established Agencies in Canada, with a view of seeking business amongst us Canadians by holding out superior advantages over English offices. With the internal management of these institutions and the substantial value of their offered security, we have nothing whatever to say; it is a question to be settled by those who attracted by the rates of premium are willing to assume a policy, but what affects us as a profession more especially is the amount offered by these offices as a fee for the professional examination of applicants for policies. It has been the rule, and still is in all respectable English offices, to give the Medical Examiner a fee of one guinea for the report on an application of a policy amounting to \$2000 and upwards, and a half guinea for examination of candidates for policies under that sum; indeed, some first class offices that we could name, give to their Medical Examiner the fee of one guinea for each and every examination made, no matter what the amount of the policy. Some of the offices of American origin seek to lessen the fees offered, and in one instance in which we were ourselves the Medical Referee, the Secretary wrote to the Agent in this city, and informed him that hereafter the sum of \$3 only would be allowed for medical examination of applicants for policies; and, although we had represented the Company for some ten months, doing a fair share of business, we were constrained to refuse to work at the reduced rate of fees. This subject has engaged the profession at home, and the offices were forced to come to terms, and when it is considered the responsibility assumed by the Medical Examiner of an Assurance company, it is but right that he should be well paid for his trouble. We think that the sooner the profession come to some understanding on this subject the better. For our own part, it has been our rule through life, and often to our detriment, to maintain faithfully the interests of the profession in the question of professional remuneration, and it is not after the experience of a quarter of a century, that we intend to alter our course. We feel convinced, that all professional men of standing in Montreal will endorse our action in this matter, and we will feel deeply disappointed if any professional brother whose report is worth receiving, should be found willing and ready to condemn our procedure by accepting the conditions offered.

Poisoning by Strychnine.—Dr. John Bartlett, formerly of Chicago, strongly recommends common salt as a curative of strychnine poisoning. He reports as many as twenty experiments on dogs, in which violent symptoms, following large doses of strychnia, ceased after emesis, induced by drenching the animals with water, holding in solution several handfuls of salt.—Chicago Medical Journal.

We beg to draw the attention of our readers to the following prizes offered by the Connecticut Medical Society for 1868.

The Committee of the Connecticut Medical Society, offer the following Prizes, to be awarded in May, 1868, viz: They renew the offer of the Jewitt Prize of Two Hundred Dollars, for the best essay on the question, "By what hygienic means may the health of armies be best preserved?" also the Russell Prize of Two Hundred Dollars, for the best essay on the subject "The Therapeutic Uses and Abuses of Quinine and its Salts."

The offer of both these prizes is extended to all physicians and surgeons of the United States, and of the British Provinces of North America.

Competitors will send their essays, free of expense, to one of the Committee, on or before the first of March, 1868, each having on it a motto or device, which shall also be written or placed on a sealed envelope, inclosing the writer's name and address.

Committee:—Benjamin H. Catlin, M.D., of West Meriden; Leonard J. Sandford, M.D., of New Haven; Henry Bronson, M.D., of New Haven; Melancthon Storrs, M.D. of Hartford; Charles L. Ives, M.D., of New Haven.

# CANADA

# MEDICAL JOURNAL

## ORIGINAL COMMUNICATIONS.

Tuberculization in various Countries and its influence on General Mortality. By W. Canniff, M.D., M.R.C.S., Eng. Corresponding Delegate to the International Medical Congress, &c.

[Read before the International Congress, held at Paris, August 1867]
To the Secretary-General, Dr. Jaccoud.—

The following statements and remarks are respectfully submitted in connection with the subject of Tuberculosis, and the hope is entertained that they will not be found altogether irrelevant to this important question, which is to engage the attention of your distinguished body.

THE INHABITANTS OF CANADA DIVIDED INTO THREE CLASSES

The inhabitants of Canada at the present time are unequally composed of the Aborigines of America, the descendants of the first European colonizers, and those who are of foreign birth.

An examination of these three classes as to health and longevity under similar circumstances may not be invaluable, nor foreign to the subject of *Tuberculosis*.

#### THE ABORIGINES.

The Indians of Canada are to a great extent domesticated, and comprise remnants of almost all the once powerful tribes which held possession of the territory of the United States and of Canada. The advent of the aborigines upon the continent of America remains an undetermined question; the circumstances of their coming are buried in the ocean of prehistoric days. Indian archæology, so far as discoveries have been made, indicates a far remote period when America was first inhabited, and that successive tribes, probably from Asia, have come as a conquering people and swept away the occupants; not always exterminating them, but forcing them to some secluded quarter where, undis-

VOL. IV.

turbed, they gradually became again powerful, and then issuing forth drove back the conquerors. The aborigines now extant may be descendants of the more ancient, as well as the more recent tribes that peopled the new world.

The broad American continent, once the domain of the Indian, is now to a great extent possessed by the European. It is a fact well known that by the advancing tide of emigration the aboriginal inhabitants are carried away, and it has been inferred that physical degeneration of the race was the cause. This point may, however, be questioned. Indeed we are in possession of facts which seem to show that the Indians under favourable circumstances do not numerically decrease. They have succumbed to the European and to the power of colonization; yet the Indians of Canada have not since the close of the war of 1812, decreased in number. Formerly these nomadic tribes were wont to traverse extensive regions of the wilderness, but the presence of the European has pressed them into limited spots of Reserve; and it is not true that their number has decreased since the tomahawk and scalping-knife ceased to do their work of extermination. It has been a common belief that civilization is inimical to long life among the American Indians, but the writer has the testimony of Captain Anderson, who was for many years Superintendent of Indian affairs for Canada and who has spent the greater part of his long life among the Indians of the Hudson's Bay Territory, that mortality is far greater among those tribes that still lead a nomadic life than with those who have become domesticated\*. In this connection it must be stated that the Indian has an intense desire for alcoholic drinks, and it is the concurrent testimony of many who have been associated with them that it is the indulgence of this passion that has led to such a great mortality.

There is no possible way of learning the rate of mortality among the wandering tribes, but respecting those domesticated in Canada, trustworthy testimony can be adduced.

In the year 1858, the Government of Canada appointed a commission to make certain enquiries concerning Indian affairs in the Province. This commission, in carrying out the object of its organization, submitted some forty questions to the superintendents of Indian affairs, and

<sup>•</sup> In returning to Canada, the writer was fortunate in having for a fellow-passenger Bishop Taché of Red River Settlement, who has been there residing among the Indians 22 years. He says that speaking generally the Indians of the Hudson's Bay Territory are not decreasing, notwithstanding their wandering life. Their exposures frequently cause inflammation of the lungs; but there are few eases of consumption.

to the various missionaries among the tribes in Canada. Most of the missionaries had been living with the Indians for many years, some so long as ten, twenty, thirty, and even forty-four years. Among these questions were the following. "Is the health of the Indians under your superintendence generally good or otherwise, as contrasted with the health of the white population in the neighbourhood." "Do the tribes under your superintendence increase or decrease in number irrespective of migration." To these questions were received replies from twenty-five persons. Of these, eleven were to the effect that the health of the Indian was equal to that of the white, four uncertain, and eight, not so good. In twelve instances their number was on the increase, in two stationary, and in eight on the decrease.

Several of the missionaries remark that the principal disease among the Indians is consumption; but that this is due to exposure, and irregular dieting while upon their fishing and hunting expeditions; and also to their indulgence in strong drink. It is stated by a majority of those who reply that those tribes which have adopted a domestic life, and whose people partake of suitable food, are not particularly subject to con sumptive diseases. It is also stated by many that the cause of the numerical decrease in a large number of the tribes, is due to the great mortality among the children, arising from their itinerant life.

From the facts and data at present available, and these are not unimportant, the conclusion is arrived at, that the aborigines of Canada—of America it may be said, whatever may be their ancestry, do not manifest a natural disposition to degenerate. With the same advantages of living as the whites, in similar circumstances as to comfort, they show no unusual proneness to tuberculosis, a disease which has received the credit of doing the work of gradual extinction.

### THE EARLY COLONIZERS OF AMERICA.

More than two hundred years have passed away since Europeans became permanent occupiers of the New World. While Canada was taken possession of by the gallant and intrepid French under accomplished leaders, the bold and adventurous English were securing a foeting in the present state of Virginia, and Commercial Holland was planting a colony in New York. Let us inquire respecting the descendants of these first colonizers of America, more particularly those resident in Canada.

#### THE FRENCH.

It is two hundred years since the effective settlement of Canada by the French took place, and it is now fully a hundred years since imigration from France has ceased. The French population did not then, according to Garneau, exceed 60,000. The number of inhabitants of French origin at the present time amounts to about 880,000. In addition to these present inhabitants of Canada, a large emigration, numbering several thousands of the French Canadians; has taken place to the United States.

Now, if the climate of Canada were inimical to Europeans, if, as has been asserted they will, under its influence, degenerate and decrease, and ultimately die out, when no longer sustained by imigration, it would naturally result that within the period of a century some indication of such degeneration would present itself. But, instead of such a calamity, the French of Canada have steadily increased in number; they do not exhibit in any respect marks of deterioration. Are the French at home brave, eloquent and wise, so are their kindred in Canada. Are the inhabitants of France long lived, the assertion is ventured, that those of French Canada are equally so. Upon this point Dr. Larue, Professor at Laval University, in reply to a question submitted by the writer through a gentleman connected with the Government at Ottawa, gives his opinion "that there are no medical statistics of a reliable nature by which the longevity of French Canadians can be established. If such did exist he is convinced by his own observation and the opinions of his colleagues that the most surprising figures could be produced in favor of the great average longevity of the Franco-Canadian race.

Dr. La Rue further states, that he has every reason to believe that consumption is of rare occurrence among the French race.

#### THE ANGLO SAXON.

Western Canada was first settled in 1784 by a band of Loyalists from the recently established United States. These refugees, who would not rebel against their King, numbered about 10,000, and were mainly descendants of the first colonizers of New England and the Dutch of New Holland, now New York.

These first settlers of Upper Canada have to a marked extent remained a distinct people. Although emigrants have continually entered the Province, intermarriage between these and the former has, until very recently, been quite the exception.

From extensive personal knowledge\*, derived from observation and collected facts, the writer is prepared to say, that among the descendants

<sup>\*</sup>During the last few years the writer has been collecting facts relative to the first settlement of the Bay of Quinté, one of the oldest sections of Upper Canada, and he is able to speak very decidedly respecting the great age to which many attain.

of the first settlers of Western Canada longevity is remarkably great, a large number reaching, not alone seventy years of age, but eighty and ninety, and even a hundred, while in physical development they are by no means deficient.

Tuberculosis is one of the prevailing diseases and causes of death among them, but it may be safely said that it is no more frequent, at least, than among the inhabitants of European nativity.

In view of the foregoing facts and statements, can the belief be entertained that the European transplanted to the shores of America must necessarily degenerate, and, in time, become extinct? If, in some parts of America, the spectacle is presented of the older families being decimated and of ceasing to exist, must we not search for other causes than those of a climatic nature?

#### EUROPEANS.

The remaining class, yet to be noticed, consists of those of European birth. It is a matter of regret that accurate data cannot be supplied upon which to base definite remarks respecting the health and longevity of imigrant settlers in Canada; in the absence of these, there can be no hesitation in offering statements based on personal observation, and the writer would humbly intimate that he has given no little attention to this subject.

The climate of Canada and the circumstances of Canadian life are found by the imigrant at first to be very severe. After a few years, however, he becomes acclimated, yet it may be said does not attain to so great an age as those born in Canada.

It does not appear that individuals predisposed to tuberculous diseases are likely to suffer by coming to live in Canada. On the contrary, many with the symptoms of incipient Tuberculosis are permanently benefited by the change.

Ontario, Dominion of Canada, July, 1867.

Lectures on the Diseases of the Eye, recently delivered before the Ophthalmic Class of the Toronto School of Medicine, and the Ophthalmic Class of the Medical Department of the University of Victoria College. By A. M. ROSEBRUGH, M.D.

# LECTURE IV. Diverging Strabismus.

According to Prof. Donders, Diverging Strabismus depends, as a general rule, upon Myopia. The nature of the relation between Diverging Strabismus and Myopia is, however, not altogether the same as that

between Convergent Strabismus and Hypermetropia. Convergent Strabismus arises from Hypermetropia, on account of the great efforts of accommodation which the optical defect renders necessary. When Diverging Strabismus arises from Myopia, however, the excessive refraction of the eye is not without its direct influence, but the chief cause of the deviation depends on the distension and change of form of the globe. It is now normally admitted that in the great majority of cases of Myopia, the cornea and crystaline lens have a normal degree of curvature, and that the defect depends altogether upon a lengthening of the antero-posterior diameter of the eye; the globe having a tendency to take the form of an elipsoid instead of a sphere.



Thus, in Fig 3, let E represent a section of a myopic eye; R F will represent the position of the retina in the normal eye upon which parallel rays are brought to a focus. The distance between the F and S will represent the amount of abnormal lengthening of the antero-posterior diameter of the eye.

This lengthening of the antero-posterior diameter interfere with the mobility of the eye in a general way; but more especially on account of its filling up, more completely, the socket,—this latter being a cavity of somewhat the same shape. The elipsoidal form of the eye in myopia affects its movements inwards as well as outwards. Out of seventeen cases of myopia examined by Donders, nine could not move their eyes through a range of more than about 50 degrees, whereas, the normal eye has usually a range of about 120 degrees. Diminished motion of the eyes outwards is little more than an inconvenience simply necessitating considerable turning of the head, but insufficiency of motion inwards is attended by more important consequences, which we will proceed to consider.

Most persons with normal vision are able to converge their eyes simultaneously upon an object that is brought as near as two inches from the root of the nose. In high degrees of myopia, however, the eyes cannot be converged to a near distance, for two reasons; in the first place, free motion of the eyes inwards is diminished by the elipsoidal shape of the ball; but in the second place, in high degrees of myopia, there is displacement of the yellow spot of the retina inwards; in consequence of

this, in order to see an object binocularly, at a short distance, (for two-and-a-half inches from the root of the nose,) it will be necessary for the cornea of each eye to converge more than would be the case with normal eyes looking at an object at the same distance; from which it is evident that motion inwards is considerably confined. Thus, in Fig. 3 let E represent a horizontal section of a myopic eye. The line B a D will represent the axis of the cornea, and the line A a F the line or axis of vision. The axis of vision cuts the cornea external to centre. In order, therefore, that the image of A may fall upon the yellow spot, it is necessary for the eye to turn inwards, so that the axis of the cornea will be turned towards B. \*

In addition, there exists in some cases a considerable degree of insufficiency of the internal recti muscles. This weakness in the internal recti muscles in the normal eye would simply give rise to what is called muscular asthenopia, but when myopia also exists, it leads to diverging strabismus.

Donders divides diverging strabismus into two divisions:—1st. Relative diverging strabismus. 2nd. Absolute diverging strabismus. The two eyes can be converged simultaneously upon a distant object, and see it binocularly; but when the eyes are directed to a near object, either one eye is used or both eyes may be converged for a short time upon the near object, when the muscles feeling fatigued (muscular asthenopia being developed) one eye diverges, (Student Knox's College.) As it is only when examining near objects that myopic persons see with perfect distinctness, it follows that if they have relative diverging strabismus, these near objects will be examined with one eye only;—the other eye, although not absolutely divergent, is not sufficiently convergent to see the object simultaneously with the other eye. In the normal eyes, this deviation of one eye would cause annoying double vision, but in the case of the myopic eye, distant objects are not seen with sufficient distinctness to give rise to any annoyance from this cause.

In Absolute Divergent Strabismus one eye is permanently divergent, and no attempt is made to see binocularly. Absolute Divergent Strabismus may arise from paralysis of the internal recti muscles, inflammation, contraction of the external rectus, and impairment of vision in one eye; but Donders has proven that at least in two-thirds of the cases the pa-

<sup>•</sup> The eyes of myopes are more nearly parallel than is the case with those whose eyes are normal, because in the myopic eye the axis or line of vision corresponds more nearly with the axis of the cornea. In some cases this gives the appearance of an apparent convergent strabismus.

tients are also myopic, and that in cases of Relative Divergent Strabismus myopia is found ninety per cent of the cases. Absolute Divergent Strabismus is usually developed from the Relative form; and occurs most frequently in adults; whereas Convergent Strabismus is chiefly to be found in children

Donders sums up the result of his investigations as follows:

- "1. Hypermetropia determines accommodative Asthenopia, which is actively overcome by Convergent Strabismus.
- "2. Myopia leads to Muscular Asthenopia, which is passively eluded by Divergent Strabismus."

The pathology of the muscles of the eye permit us to review-

TREATMENT OF STRABISMUS.—If a case of Convergent Strabismus from Hypermetropia be seen in its incipient stage, the squint will disappear if the Hypermetropia be neutralized by the proper convex spectacles. If, however, the use of the glasses be discontinued, the Strabismus is apt to re-appear. Convergent Strabismus is sometimes accompanied by high degrees of Hypermetropia, and consequently requires strong convex spectacles to neutralize the optical defect. A number of cases have come under my observation, where children were obliged to wear spectacles almost as strong as cataract glasses, in order to correct their Hypermetropia.

In cases where the Strabismus has become permanent, the defect cannot be treated without an operation. If the patient or his friends object to an operation, or if from any cause the operation is deferred, insensibility of the retina of the faulty eye may be prevented by having a bandage placed for a few hours a week over the other eye, so as to call into activity the function of the retina of the faulty organ.

Before operating, the degree of deviation of the eyes should be accurately measured, so as to enable the operator to judge of the extent of the operation necessary for its relief. This can be done with sufficient accuracy in the following maner:—direct the patient to look at some distant point directly in front, then with pen and ink, mark upon the lower eyelid the point corresponding with the direction of the pupil; now cover the non-deviating eye and direct the patient to fix the faulty eye upon the distant point; the direction of the pupil is again to be marked upon the lower lid of the same eye. The distance in lines between these marks upon the lid, will give the degree of deviation; if the marks upon the lid are, for instance, three lines apart, the deviation would be said to be four lines.

In the old operation of Dieffenbach, as usually performed in a case of Convergent Strabismus, a vertical incision, about half an inch in length,

is made through the conjunctiva and subconjunctival tissue of the faulty eve about midway between the cornea and the caruncle; the muscle is then taken up by a hook and freely divided with a pair of scissors, behind the hook, and some distance behind the tendinous insertion of the muscle. In cases of extreme Convergence, it was even recommended to remove a portion of the muscle. After the division of the muscle the eye was allowed to take its chance, if the eyes were parallel, well, if not, the surgeon could do nothing farther either to increase or diminish the effect of the operation. From this mode of practice satisfactory results were attained in only a small proportion of the cases, and even in the most successful ones in which the faulty eye was brought to occupy a central position, there were other deformities consequent upon the operation, which detracted very much from the result. When the muscle is divided behind the tendon, it becomes attached so far back that the mobility of the eye is very much diminished; and in some cases the antagouist muscle draws the eye so far in the opposite direction that the Convergent squint is changed to a Divergent one. The caruncle usually shrunk behind the inner commissure of the lids; the semi-lunar fold of the conjunctiva becomes obliterated, giving the organ the appearance of an artificial eye; and in many cases the eye is too prominent after the operation. It was only yesterday that I assisted a medical friend to perform a secondary operation to relieve the deformity following Dieffenbach's operation. The mobility of the eye was considerably diminished and its movements irregular. The organ was more prominent than the opposite eye and was slightly divergent; the caruncle had retracted and the semi-lunar fold had disappeared.

In the modern operations for Strabismus the amount of the deviation is first of all accurately measured, and in all cases where the deviation is from two and a half to five lines, it is now the practice to divide the operation between the two eyes in preference to performing a sufficient operation upon one eye to bring the two parallel. By thus dividing the operation between the two eyes, a lesser operation will be performed upon each, and consequently the mobility of the eyes will be less interfered with. The operation is changed in other important respects. The conjunctival wound is now made much nearer the cornea than formerly, the muscle is taken up near its insertion, and instead of dividing it behind the hook, the muscle is cut in front and as near its insertion as possible, thus a tenotomy, and not a myotomy, is performed.

Another modification recently introduced renders the result of the operation perfectly under the control of the operator. If after a division of the tendons of both internal recti there should be one divergence, it

can be corrected by bringing together with a silk suture the edges of the conjunctival wound. The greater the divergence the larger must be the portion of conjunctiva that is included in the stitch. The suture acts beneficially also by closing the wound, promotes healing by the first intention, and it assists in preventing shrinking of the semi-lunar fold and caruncle.

In all operations for Strabismus the immediate object is to change the position of the insertion of one of the muscles. In the regular operation for convergent Strabismus the tendon of the internal rectus is divided. it then is drawn backwards and becomes attached to the sclerotic a short distance behind its former attachment; the squint is treated then by setting back the insertion of the internal rectus. But the convergence could also be corrected by setting forward the insertion of the external rectus. This setting forward of the insertion of the muscle is sometimes the only operation that will relieve Strabismus. This operation has its application more frequently in cases of Divergent Strabismus. In diverging Strabismus there is very frequently insufficiency of the internal recti muscles; when this is the case the external recti of both eyes may be divided without relieving the divergence; in that case it is necessary to increase the efficiency of the internal recti muscles by dissecting up their tendinous insertions and securing their attachment further forward. This is the operation that I assisted in performing on the patient yesterday, to counteract the effect of a rather free setting back of the internal rectus two or three months previously.

After the Strabismus is relieved by an operation, the optical defect upon which it depends must also be relieved, or the squint may return; it is more especially necessary in cases of convergent Strabismus depending upon Hypermetropia. This is a matter that hitherto was altogether neglected, and consequently was a very frequent cause of failure.

The great point to be kept in view, however, in treating cases of Strabismus, is to restore binocular vision. The eyes may appear to be parallel, and the patient's friends may be well pleased with the result, but unless the binocular vision is restored, the surgeon cannot congratulate himself with having performed a perfect cure.

Chemical Selections. By E. S. BLACKWELL.

Notes on crystals deposited from the Brain, by S. W. Moore. (Chemical News.)—In the month of June this year (1867,) Mr. Stuart, curator of the Museum, St. Thomas's Hospital, called my attention to

the fact that he had noticed in some of the brain preparations a deposit of crystals, which appeared to him to present a very beautiful and unusual appearance; he thought, perhaps, that I might like to examine them chemically, which I have done, thinking the results may lead to facts which will ultimately throw some light on the now very imperfectly understood compounds of the brain.

On inspecting a jar containing the deposit, there was found a very thick layer of crystals at the bottom, which, upon further inspection, were seen to have the form of rhombic plates; over these, however, there was a layer of what might have been mistaken for mucous or brain matter, but on examination with the microscope they presented a very beautiful appearance, two or three distinct forms being apparent, viz.— $\alpha$ . small stars, formed of globular bodies (of which there are seven, six aggregated one round,) a little smaller than the male human blood corpusele.  $\beta$ . resembling two pieces of tape, one in a semicircle, the other stretched across its diameter, the ends on both sides being twisted.  $\gamma$ . This form was one piece only, its ends being brought round upon one another, and twisted.

These strange forms suggested the idea that some albuminous principle might probably have united itself with a crystalline substance, and have caused these structures to become manifest in the attempt to crystallise; they gave, under the influence of polarized light, a distinct cross, and whatseems to confirm the supposition of their being a colloid is that, upon testing, nitrogen was developed. They are saponified by KHO, and dissolved by hot absolute alcohol, and separate out on cooling in a granular form, and are of course insoluble in water. On presenting these various tests to the crystals which were so densely crowded at the bottom of the vessel, some very interesting data were collected, agreeing with the tests for no other hitherto mentioned brain compound.

In appearance the crystals were waxy, they were tasteless and insoluble in water; on ignition they burned away with a bright smoky flame, leaving no residue whatever. The tests for N. P. and S, were carefully applied, but with no result; the substance was precipitable from its ethereal solution by alcohol; its melting point was 1030 C., and on combustion gave the following per centage:—Carbon 43.79, Hydrogen =8.09 and Oxygen 48.12. From this an empirical formula may be calculated having the following constitution,  $C_7$   $H_{\,16}$   $O_6$  or  $C_{\,12}$   $H_{\,26}$   $O_{\,10}$ , the latter, perhaps, giving a calculated result nearer the found one, viz. Carbon 43.64, Hydrogen 7.88 and Oxygen 48.48.

From the results obtained above we may safely conclude that the substance is not cholesterine, its high percentage of oxygen, and its low

melting point, excluding it from that supposition. It is equally impossible that it should be cerebric acid, because it is perfectly neutral and contains no nitrogen; the abscence of phosphorus proves it cannot be oleophosphoric acid. On exposing to the air the spirits from which the crystals had been taken, a fresh crop formed; these, however, were only crystalline plates of cholesterine.

### LONDON CORRESPONDENCE.

. Last evening a brilliant assemblage met at the Conversazione given by the President and Fellows of the Royal College of Physicians in Pall Mall. This annual gathering is always looked for with considerable interest, as it is without exception the most recherché thing of the kind that takes place in the metropolis. And so it ought to be, for no other institution represents the aristocracy of learning, of mind, and intelligence, and of sterling wealth, such as is met with here. All the great names in the profession of medicine here assemble, philosophers every one, men of thought and of wisdom, who do an amount of good which scarcely can be realized. The recent festivities in honour of the Sultan of Turkey prevented the Prince of Wales being present, for he (as did his distinguished father, the late Prince Consort,) loves once in a while to grace the classic halls of Harvey with his presence. Many of the most learned physicians of the Provinces think it no trouble to travel to London to attend the soirée, and hence one sees faces annually that come from considerable distances. Amongst the strangers present we noticed Archdeacon Patton, of Cornwall, in Canada, who was taken for a Colonial Bishop. Of the great number of interesting objects exhibited, may be mentioned a rare series of old Wedgewood portraits; apparatus to illustrate Professor Tyndall's experiments on the action of Sonorous Vibrations on Gaseous and Liquid Jets; a collection of specimens illustrating the British Pharmacopaia of 1867; and the splendid portrait of Sir Thomas Watson, Bart., the late President of the College, painted by George Richmond, R. A. Refreshments were most liberally provided in the large room on the ground floor, looking into Trafalgar Square.

Whilst the College stands so deservedly high in public estimation, the profession is puzzled to understand the rules that guide the Council in their annual selection of the names for the fellowship, for it would seem as if persons, howsoever worthy in other respects, were selected for their being celebrated for nothing in particular, and certainly for their having

advanced science not in the least degree. Therefore the fellowship, like that of the Royal Society, does not carry the weight with it that it would otherwise do. In fact it is an honour to be a member and not a fellow, until some change is effected.

Since my last letter, the veteran Lawrence has been struck down, and has passed away from among us. He was not long permitted to enjoy his newly acquired honours. It is just twenty years ago since we were first introduced to him, and although he was then over sixty, his activity of mind and brilliancy of operation were conspicuous. He will be long remembered by the rising generation of Bartholemew's men, because he continued in harness almost to the last minute. He is succeeded by his second surviving son Trevor Lawrence, who was a Surgeon in the East India Company's service.

If the profession, in the death of Sir William Lawrence, have lost a Medical Baronet, they have gained another in the accession of Sir Duncan Gibb to the family honours. He acquires his rank with some prestige, for he has not only made himself a name by his numerous researches both in Medicine and Science which have rendered him worthy of the honor, but he has succeeded to one of the oldest Scottish baronetcies in the kingdom, the date of its creation being 1634. As Sir Duncan is a Canadian by birth, we must be excused for stating that we have been informed on the best authority that his ancestor, the first Baronet, was a Groom of the Bedchamber to Henry, Prince of Wales. and on his death, in 1612, to James I; whilst his father before him was Groom of the Bed Chamber of James I for the long period of 40 years. from the time that the King was a lad of 10 or 12 years of age. The family originally came from Linlithgow, but the baronetcy takes its family name from Falkland in Fife, in the vaults of the old palace of which town are buried the remains of the first Baronet. Various rumours are afloat concerning Sir Duncan Gibb, such as, that he is about to retire from practice, that he has been requested to stand as member of one of the new Boroughs, that he is going to reside in Scotland, &c., but we do not vouch for the truth of any of them.

There is an on dit current, of an attempted act of gross injustice at the Hospital for Consumption, Brompton, which has not found its way into the Medical Journals. Dr. Hamilton Roe—a man by no means popular in the profession—on his retirement from the Hospital was made one of the consulting Physicians, but at the election strenuous efforts mere made to place him above some of the other consulting physicians. This the committee would not stand, and the previously concerted plan was defeated. Such a thing has never before been known or heard of,

and has excited great indignation against those (and their names are well known) who wanted to play off this trick. The great authorities on chest disease now in London, are Dr. Walsh and Dr. Scott Alison, and for diseases of the heart more particularly, Dr. Peacock, all good men and true. Dr. Pollock is a rising man, but has laid himself open to ridicule by the pedantic title of his work on consumption which is styled "The Elements of Prognosis in Diseases of the Chest, &c." Ye Gods!! fancy such a title as "The Elements of Diagnosis in Diseases of the Tongue." Yet one is just as sensible as the other. The vacancy created by the retirement of Dr. Roe, has been filled by the election of Dr. Williams, a son of Dr. C. J. B. Williams, a promising youth.

The Princess of Wales has so far recovered that she has been out several times for an airing, and she is shortly to proceed to one of the German watering places celebrated for its virtues in Rheumatism. Her illness has been a great draw-back to London Society, for she was deservedly popular. Her surgeons, Mr. Paget and Mr. Prescott Hewett, have acquired great credit, for the care and good management they devoted to the treatment of her complicated arthritic affection. They will acquire their well merited reward ere long. It is expected that the honour of knighthood will shortly be conferred upon Mr. Henry Thompson, one of the most affable as well as most skilful of London surgeons. His kindness to strangers, we are sure many gentlemen in Canada can testify to-

Of arrivals from Canada, we have heard of Dr. Hingeston who is now in France and Dr. F. W. Campbell at present in Glasgow. The meeting of the British Medical Association next week in Dublin may probably induce them to visit Ireland. Dr. Malloch—one of the most promising of Canadian graduates—passed through London on his way to Canada last week, after a year's sojourn in France. He has been a most industrious and persevering student, and carries back with him the best wishes of all his friends here for his success in life.

In my next letter some space shall be devoted to the doings of the expected meeting of the British Association for the advancement of Science at Dundee, in September, under the presidency of the Duke of Buccleugh. We purpose at the same time to get a few whiffs of air amongst the romantic scenery of the Highlands.

London, July 25th, 1867.

## PERISCOPIC DEPARTMENT.

# Surgery.

CASE OF GUNSHOT WOUND OF THE HEAD AND BRAIN-RECOVERY.

By Jas. S. Washington, M. D., Indian Bay, Arkansas.

On the fourth of December last, I was summoned to a negro boy, about 22 years of age, who had been shot from a revolver, the ball taking effect about the commencement of the temporal ridge, left side, passing transversely through the brain, and lodging, I presume, about the junction of the parietal and occipital bones, as near as I could judge from the probe and position when shot, as the ball did not emerge from the skull.

I saw the boy within an hour from the occurrence of the accident; he was then stretched upon his bed, near where he had fallen, in a supine condition; the pulse sixty per minute, tremulous and weak; coma; eyes half opened and very dull; breathing labored and stertorous at times, and he could not be aroused by any means from insensibility; had two convulsions when my probe touched the brain. He lost ten ounces of blood and one teaspoonful of cerebral matter. I carefully removed all blood, etc., from the wound, applied cold cloths to the head, and left him with orders to be kept quiet, and the cuticular surface to be kept warm by means of hot bricks to the extremities.

5th.—I saw the boy again, still in a comatose condition; breathing more calm; pulse seventy, full and regular. Was ordered xv grs. hyd. chlor. mitis, and the above continued.

6th.—Pulse the same; breathing not at all labored; head cool and pleasant. Made water twice, freely, through the night, rising to his feet for that purpose. As his bowels had not been moved for three days, I again repeated the dose of hyd. chlor. mitis, placing it dry upon his tongue, as he would immediately reject any fluid put into his mouth.

8th.—A good evacuation obtained through the night, pulse seventy-two, about his natural standard; sitting up at the fire, but apparently unconscious of all passing around him; ate an apple, but refused all other nourishment, dashing water or coffee to the floor, when offered him. The above dose hyd. chlor. mitis. repeated, and cold to the head continued.

10th.—Pulse yet the same; right arm and hand paralyzed, lifting it about with left hand; no excitement about the brain: wound healing externally very fast.

12th.—Found patient again at the fire; ate greedily any article of food given him; pulse still regular; bowels moved once, getting up as usual on the floor; has not spoken since wounded, but manifests a re turning consciousness, by assisting to dress himself with left hand, etc-His diet has been mild, and room kept quiet.

15th.—Very much improved both mentally and physically, possessing all his faculties, excepting a slight imperfection in power of speech, walking about the yard without assistance.

Dec. 30th.—Nothing of interest has occurred from last visit up to this date, except an occasional pain in the forehead. Upon examination I found the orifice had closed. I made an opening with a probe, evacuated a small quantity of pus, gave a saline cathartic, and the symptoms soon disappeared.

Jan. 15th.—Patient expresses himself well and able to do any kind of labor, and places himself under my employ for the ensuing year.

April 29th.—Five months have now elapsed since the boy was shot, and with the exception of not being able to grasp anything as small as a knife in right hand, a partial loss of power of speech, and a small fistulous opening from the wound, is as well and hearty as before the accident,

My opinion was repeatedly asked in regard to the recovery of this case. and I as often unhesitatingly gave an unfavorable reply; so this is one more case calculated to show the extreme caution necessary in prognosis after like injuries.—Southern Journal of Medical Science.

### FRACTURE OF HUMERUS AT SURGICAL NECK.

SURGICAL CLINIC OF DR. AGNEW, PENNSYLVANIA HOSPITAL.

This man some days ago fell from the third story of a building and struck on his shoulder. When he came into the hospital he was unable to raise his right arm; was suffering from a great deal of acute pain, and there was some discoloration and swelling about the shoulder. Examination showed a fracture in the surgical neck of the humerus, a not uncommon accident in this hospital.

This fracture is sometimes overlooked in consequence of its being situated so high up and buried underneath the deltoid muscle, still it is not very difficult to recognize. On raising up the arm, if there has been a separation in the continuity of the bone, there must be an angular deformity, which may be felt with the fingers in the axila. Crepitation can usually be produced, which can be both felt and heard. The displace, ment which occur are as follows: the lower end of the upper fragment

is tilted upwards and rotated inwards. Upwards by the supra-spinatus muscle, which passing underneath the acromion process to its insertion in the greater tuberosity, near the head of the humerus, is in a favorable position to produce that deformity, rotated inward by the subscapularies; the lower fragment is drawn in towards the side by the action of the latissimus dorsi and the pectoral muscles and upwards, (thus shortening the distance between the acromion process and external condyle,) by the action of the clavicular fibres of the great pectoral muscles and the deltoid. The arm is therefore usually found shortened after this accident, and the lower fragment towards the body and in the axilla. Sometimes when the fracture has been attended with contusion and much injury of the soft parts and the obliquity of the fracture has been such as to produce a sharp point, this will be drawn up in contact with the axillary plexus of nerves, and great suffering will be experienced by the patient.

In the treatment, the first thing to be done is to restore the parts to their proper position. Sometimes, in a little while after the muscles have become weary, the weight of the arm will in a measure draw the lower fragment down. This should not be waited for, however, but the parts should be replaced by making traction on the elbow joint, and then bringing the arm to the side of the body, thus at once, by relaxing them, setting aside the displacing power of the pectoral and latiss imus dorsi muscles. A little traction of the arm, with the introduction of the finger on the inside of the humerus far into the axilla to mould the fragments into position, is all that is necessary for their proper restoration. To retain them so, the simplest and most efficient method is to surround the arm by a spiral reverse from the fingers to the shoulder, for the purpose of controling muscular action, giving a proper support to the capillaries and preventing swelling, and then to place an internal angular splint on the inside of the arm, a piece of muslin being interspersed between it and the side of the body to prevent excoriation.

It its regarded by some as very essential that there shall be a wedge shaped pad inserted between the side of the body and arm, but cases do not always demand the insertion of such a pad. There is a belief that it counteracts the tendency of the latisimus dorsi and pectoral muscles to draw inwards the lower fragment, but this is done away with by their relaxation effected by the placing of the arm at the side.

On the outside of the arm a concave splint is placed, made of a piece of binder's board of a length equal to the distance from the acromion process to the external condyle, and of a breadth sufficient when placed in hot water and applied to the arm, to pass around the an-

terior and posterior portions to the angular splint on the inner side. This should be modeled so as to extend over and fit the shoulder. The value of having it rest against the acromion process is that a point of resistance is thus obtained, so that the fragments can be brought firmly in contact with each other, and the lower fragment kept outward on the application of the bandage. A bandage is then applied over the splint, and the arm secured to the body by a thin roller, using a sling to support the forearm, the elbow being left free so that the weight of the arm may act as an extending force.

A variety of splints may be employed; for instance, vulcanized rubber makes a very elegant material. The great object in the treatment of fractures is to simplify the subject and use the simplest and cheapest dressings that will accord with efficiency. If equally as good results can be accomplished with cheap binder's board and a shingle as with the most costly rubber, why not employ them?

The internal angular splint should extend up to the axilla, oakum or cotton being used to ward off pressure. As the dressings are repeated the angle of the splint should be altered. The tendency is always for the arm to become somewhat stiff at the elbow, but by changing the angle of the splint a little passive motion is kept up, which will not at all interfere with the proper relation of the fragments. The use of the internal angular splint is to prevent the patient from extending his arm, which of itself would be sufficient to produce displacement.—Philadelphia Medical and Surgical Reporter.

#### ON LIGATION OF VEINS.

By Jno. N. Monmonier, M. D., of Baltimore, MD.

In the time of our predecessors, the application of a ligature to a vein, particularly a large trunk, was generally regarded as a certain and sure cause of inflammation of the vessel, pyæmia and consequently death. Until the occurrence of the recent civil war, I must acknowledge that my mind was considerably impressed with the same idea; but during the conflict I met with many cases of alarming venous hemorrhage, caused either by the instruments of warfare or the surgeon's knife, which did not yield to the ordinary hæmostatics, pressure, torsion, cold applications, etc. These cases were of such frequent occurrence that I was compelled to regard the application of the ligature as a dernierresort for arresting the flow of blood. I encountered, from this cause, much difficulty and annoyance in amputations, especially of the thigh and leg, and also in the extirpation of tumors. It is true that in many of the cases operated upon there existed a hemorrhagic diathesis or a

scorbutic condition of the system, wherein hemorrhage was more likely to occur and become troublesome. Heretofore the supposed dangers of tying a vein were phlebitis and pyœmia, and for this reason many surgeons refrained from performing the operation. But I must say from personal experience and extensive observation during the war, I saw but few cases which terminated in either of these affections. Some ended in secondary hemorrhage, which, I believe, is far more apt to supervene. Secondary hemorrhage from the internal jugular vein, following the ligation of this vessel, was comparatively a very common occurrence. I observed phlebitis and pyæmia were more frequently produced by lacerated, punctured or contused wounds, than those inflicted by the knife and the irritation caused by the application of the ligature.

As all my accurate notes and records of cases were either lost or destroyed with the surrender of the Army of Northern Virginia, my statements are mostly made from memory. The following are some of the few cases, operated upon by myself, which I propose to mention.

In thirty or forty eases of amputation of the thigh the femoral vein was ligated with no bad result, excepting in one where pyæmia followed and resulted fatally on the eighth or tenth day after the operation. In one case of a wound of the femoral vein, caused by thrust of a bayonet, the ligature was applied and gangrene of the lower extremity followed about the fifth or sixth day.

In one case of the brachial artery, partially severed, with entire severance of the axillary vein, the hemorrhage from the latter vessel not yielding to pressure, the ligature was applied and with no serious result. A soldier was wounded in the left external carotid artery and internal jugular vein, by a carbine ball which emerged posteriorly near the base of the cranium. This was one of the cases of wounding of these vessels which instantly proves fatal if the surgeon is not at hand to give immediate assistance. At the time the man received the injury a surgeon was by his side, who instantly stuffed the wound full of lint. This for a short space of time arrested the hemorrhage. I operated upon the case, tying the common carotid, for the wound in the external carotid was so near the bifurcation as to preclude the possibility of ligating it. After trying the ordinary measures to arrest the hemorrhage from the vein, and failing, I did not hesitate also to ligate it. Secondary hemorrhage did not follow the application of the ligature, and the patient entirely recovered. In some fifteen or twenty cases of amputation of the fore arm the median and basilic veins were ligated, as the hemorrhage from them was obstinate. In two of these cases secondary hemorrhage supervened. In one pyæmia The sutures most generally used in these cases were silk, and in some few. silver wire and horse hair .- Philadelphia Medical and Surgical Journa, TREATMENT OF ANEURISM; ADVANTAGES OF COMPLETELY ARRESTING THE CURRENT THROUGH THE SAC.

BY E. D. MAPOTHER, M. D., OF DUBLIN.

The treatment of aneurism by compression had been established in Dublin, but the principle on which the cure was sought for seemed to the author to be erroneous. It was to lessen the current through the artery leading to the sac, layers of fibrine being expected to form within the latter-The author contended that there was no pathological evidence that such occurred; and asserted that the cure was accomplished by sudden clotting. dependent on the pressure being made complete for some minutes, or perhaps hours, during the protracted treatment, which had averaged twenty-five days. He detailed two cases, in which complete arrest of the current had succeeded; in one, an ilio-femoral sac became solid after pressure of four hours and a half on the common iliac and superficial femoral arteries. In a popliteal case, pressure on the femoral had cured in nine hours and a half. Chloroform in both cases was kept up during the whole period of pressure. Dr. Mapother adduced several facts and arguments to prove that aneurisms may be cured by clotting; the proximal pressure being complete, and the sac being kept full by distal pressure, as suggested by Dr. O'Ferrall, or by flection in popliteal cases as applied by Mr. Hart. Relapse, or suppuration, were improbable, and embolism less likely to occur than in the mode of compression heretofore advocated. Chloroform was a necessary adjuvant to this method of clotting by complete compression.—British Medical Journal.

BY GEORGE BUCHANAN, A. M., M. D., OF GLASGOW.

Dr. Buchanan began his paper by stating the objections which had been urged against the operation, and combating these by arguments which he believed sufficient to establish its utility and propriety. In particular, he urged that the success which had attended the operation in the cases already recorded was quite conclusive evidence in its favour. He then proceeded to narrate the case which had occurred in his own practice. Jane O., had suffered from elephantiasis of the left leg for several years before she applied to Dr. Buchanan in November 1866. The disease began, five years before that date, with an attack of erysipelas, which on passing off, left the leg somewhat swollen. Successive attacks of erysipelas were followed each by an additional enlargement, till the

ON THE TREATMENT OF ELEPHANTIASIS BY LIGATURE OF THE MAIN ARTERY OF THE LIMB; WITH A CASE IN WHICH CURE WAS EFFECTED BY LIGATURE OF THE EXTERNAL ILIAC ARTERY.

limb assumed the present size. She was treated at the Dispensary for Skin Diseases for some time; and the rest and other appropriate treatment enjoined seemed to have had the affect of slightly diminishing the size; but the result was so trifling that she was recommended to Dr. Buchanan for surgical treatment. On admission to the Royal Infirmary, the measurements of the limb were, round the ankle, 18 inches; round the calf, 26 inches; round the middle of the thigh, 23 inches. On December 21st, 1866, Dr. Buchanan applied a ligature to the external iliac artery. The day after the operation the tissues were softer, and on the 25th were decidedly flabby. On that day, the measurements were: round the ankle, 16% inches; calf 21% inches; thigh, 22% inches. The ligature came away on the thirteenth day, and the wound slowly healed She made a good recovery; and at the date of her dismissal, April 30th, 1867, the measurements were: round ankle, 141; calf, 17; thigh, 20. The case might, therefore, be accepted as another proof of the efficacy of of Dr. Carnochan's proposal. Dr. Buchanan concluded by remarking that the mode of action of the operation might be referred to the combination of two principles: first, the ligature of the artery, by diminishing the amount of blood entering the leg, will cut off that of the supply producing the overgrowth; secondly, by reducing the force of the circulation, it will induce the condition most favourable to the activity of absorption.—British Medical Journal.

### LIGATION OF THE COMMON CAROTID.

By H. WARDNER, M. D., Of Cairo, Illinois.

Adolph Bion, an artillery soldier, while stationed at Corinth, Miss., in August, 1862, received an incised wound in the right side of the neck, from the sharp edge of a heavy piece of glass (the bottom of a brandy bottle), opening the external carotid near the bifurcation. The accident occurred about six o'clock, P. M. The hemorrhage was very profuse, but was partially checked by a compress and roller wound several times around the neck by some representative of the medical staff who chanced to the present, and by syncope, which succeeded each fresh outburst of blood.

I saw the patient about  $9\frac{1}{2}$  o'clock the same evening. He was lying n the open air upon the ground, his face, lips, and tongue entirely bloodless, his wrist almost entirely pulseless, and he was incapable of answering any questions. Fresh arterial blood was continually escaping from under the dressings.

I immediately cut away the bandage, and removed a large clot which had formed in the wound, and which was pressing upon the trachea so that he breathed with difficulty. His breathing was instantly relieved. There was a sudden gush of blood which had been accumulating in the wound and areolar tissue. The common carotid was then compressed with my thumb, and held for one hour, when he opened his eyes, and I noticed a little, very little, color returning to the lips. He asked for water, which was given him. After another hour, I placed a hard roller upon the artery, instead of my thumb, and held it in its position by laying one end of a stick of wood upon it. A man was stationed on each side of him, with strict orders not to allow him to move a muscle until morning.

(There were two reasons for not ligating the artery at once. 1st. It did not appear possible that the man could revive; and, 2d. There was but one solitary candle at hand, which but little more than made visible the intense darkness of a very cloudy, moonless night.)

At 8, A, M., I was notified that the man was alive and feeling well. and that he had not stirred a hand or foot. A half-hour later, I was again notified that in attempting to urinate, he had moved his head a little, when the blood gushed out again. In a few moments I was at the spot ready to apply the ligature. He had fainted, and the moment was seized to take up the common carotid, which was tied just above the omo-hvoid. The vessel was not tied above the wound. No further hemorrhage occurred at the time, and under careful diet he slowly recovered. The ligature came away on the eleventh day. At the expiration of five weeks he was able to walk a few rods with help. During the sixth week, it became necessary to remove him about one mile, to the Central Hospital. He was taken in an army baggage-wagon, which was driven half the distance over a very rough corduroy road. The ride wearied him and caused a good deal of arterial excitement, with tendency to congestion of the head. During the following night he had an attack of hemorrhage from the wound, which had not entirely closed, which returned during the three succeeding nights. A tent was introduced and pushed to the bottom of the wound, and then saturated with the solution of the persulphate of iron, and allowed to remain until it was discharged by suppuration. He was treated with veratrum viride, and kept on a low diet. The hemorrhage did not return. He slowly recovered, was discharged from service, and is now in business connected with a firm in St. Louis. -- St. Louis Medical and Surgical Reporter.

# Medicine.

#### TREATMENT OF WHOOPING COUGH IN THE LONDON HOSPITALS.

Every old woman has a certain cure for whooping cough. There is probably no ailment which has offered a finer field of enterprise to the empiric. It will be seen that the experience of our hospital physicians is for the most part against curative effect of any remedy in this complaint, although due credit is accorded to the relief which may be given by the use of certain drugs.

St. Thomas' Hospital.—In the department for children's diseases at this hospital cases of whooping-cough have been unusually numerous during the past eighteen months. For the most part the cases presenting themselves have been of from one to three weeks' standing, although not a few cases which have lasted for as many months apply from time to time for treatment. As a rule, the more recent cases are complicated with a varying amount of bronchial catarrh—the catarrh, that is, of the first stage, lingering on and not unfrequently increasing after the pertussis has become fully developed; and the treatment pursued by Dr. Gervis in these cases has, therefore, generally a necessary reference to this condition. The usual prescription, for instance, for a child of four years would be more or less as follows: -P. L. Solution of acetate of ammonia, half an ounce; spirit of nitric ether, one drachm; chloric ether, half a drachm; oxymel of squills, one drachm and a half; syrup of tolu, two drachms; water to two ounces, two teaspoonfuls every six hours. In addition to this medicine, of which the chloric ether is the permanent element, and the other constituents the variable, Dr. Gervis lays much stress upon the use of the chloroform liniment, directing that it is to be rubbed into the chest both anteriorly and posteriorly night and morning. Under this treatment, and with the usual directions as to diet and regimen, there is almost invariably considerable improvement within a week, and very frequently within ten days or a fortnight the "whoop" has quite passed off, although some amount of cough may linger for a little while, and require appropriate treatment. In more chronic cases, and where there is little or no bronchial disturbance, alum is substituted for the saline in combination with chloric ether; and, as in the other class of cases, the chloroform liniment is employed externally. If in cases where the catarrhal symptoms have subsided, but where the whoop remains, there should be much debility, the combination of quinine with the alum and chloric ether is very ad vantageous. If symtoms of cerebral irritation, with or without convulsions should occur, Dr. Gervis has repeatedly obtained the greatest advantage from small doses of morphia; and this both in cases where no remedial measure for the complication have been previously tried, and in others where antiphlogistic treatment—leeches, calomel, blisters—has been assiduously but unavailingly adopted. In many such cases this medicine has acted as a charm, quieting both the pulmonary and cerebral disturbance.

St. George's Hospital .- Dr. Dickinson says we neither know its seat nor its antidote. It runs its appointed course regardless of the Pharmacopœia. A more or less persevering trial of most of the remedies which have been urged as able to cut short the disease has resulted in failure. Expectorants, remedies reputed as antiphlogistic, drugs which have no repute except as cures for whooping cough, irritating applications, including Roche's embrocation, alum, nitric acid, bromide of ammonium—these and others have been tried by Dr. Dickinson, and found wanting. As regards the disease in question, such remedies may be divided into two classes-those which do harm, and those which do good. Antimonials and all such remedies of the depressing class, appear to be injurious by lowering the patient without touching the disease; while the most that can be said for nitric acid and bromide of ammonium is that where they are given in small doses they do no obvious mischief. Whooping-cough appears to be as essentially incurable as typhus or any of the specific fevers. At the same time, good may be done by meeting urgent symptoms as they arise, and by directing treatment to the various complications which are apt to endanger the patient.

When the spasmodic cough is violent and threatening, as is apt to be the case in the later stages of the disease, medicines which act as sedatives may be given with advantage. Opium is sometimes useful under these circumstances, sometimes belladonna; hydrocyanic acid is better than either. The dilute acid of the Pharmacopæia, in minim or half-minim doses, according to the age of the child, is more effectual than anything else in diminishing the laryngeal spasm, which is often a source of danger.

King's College Hospital.—In the out-patient department of this hospital in the early stages of whooping-cough the simplest expectorants only are employed by Dr. W. S. Playfair. When the disease is more fully developed, the bromides either of potassium or ammonium (for there appears to be no marked difference in the action of the two salts), have been on the whole more frequently used than any other drugs. They have been generally given in doses of a grain for each year of the child's age, increasing the amount gradually if they seem to be of service. In a large number of cases the use of this medicine has been attended by marked benefit; often it has failed to be of service, even in cases apparently the best suited

for its employment. The class of cases it which it most frequently proves beneficial are those in which the paroxysms are very frequent and severe, indicating much implication of the nervous system. In such it often quiets the convulsive cough in a most remarkable manner.

The next most useful remedy has been found to be belladonna, which is generally tried when the bromides have failed. In the more advanced stages of the disease, and in very feeble children, it has been found of much use given in combination with cod-liver oil and syrup of iodide of iron. In the weak and cachectic children that attend the out-patient department of a large hospital the use of some such tonic may be considered absolutely essential, and the above combination has been found to be very valuable.

Minute doses of hydrocyanic acid, generally combined with some preparation of bark, are sometimes serviceable. It seems to act best in the same class of cases as the bromides, but appears to be less generally efficacious. Its frequent failure may, perhaps, be in part ascribed to the care required in prescribing so powerful a remedy in out-door practice, where mistakes are necessarily frequent, and where the effects of particular drugs cannot be carefully watched.

The frequency of secondary chest complications has been remarked—the inevitable consequence of bringing the children to the hospital in all kinds of weather. It has been found that any depressing treatment is worse than useless when such complications arise, and that they are best treated by enveloping the chest in large linseed-meal poultices, or in damped cotton wadding and oiled silk, along with mild counter-irritating embrocations. Small doses of sesquicarbonate of ammonia and chloric ether have generally been given internally, with nourishing diet, and stimulants when necessary.

Westminster Hospital.—It is now some thirteen years since Dr. Gibb submitted to the notice of the profession his mode of treatment of whooping-cough by nitric acid in a monograph on that disease. A large experience of its use since then, both in public and private practice, has convinced him of its great value, and that he had not exaggerated its good effects. Its internal use he has found not only serviceable in curing the pertussal malady, but at the same time prophylactic against intercurrent throat complications. His formula consists of an ounce of the dilute nitric acid, four drachms of compound tincture of cardamoms, and enough simple syrup to make a six-ounce mixture. For an infant the dose is a teaspoonful every three or four hours, and for children from two to five years of age two or three drachms at the same periods. Occasionally he has found it convenient to add an ounce of glycerine, diminishing the mixture by an equal quantity of the syrup is liked by the child and is

well borne, and the good effects are very speedily visible in diminishing the severity and frequency of the spasms. According to the frequency of the paroxysms, together with their violence, severity, and duration, so is there soreness or uneasiness at the upper part of the larynx; this Dr. Gibb obviates by the topical use of a solution of nitrate of silver to the larynx (twenty grains to the ounce) by means of a curved brush.

The advantage of the nitric-acid treatment is that it can be given in the three stages of the disease. When the nervous element, however, is very strong, and there are manifestations of celebral irritation, Dr. Gibb has substituted the bromide of ammonium for the nitric acid, in doses of from four to fifteen grains according to age, combined with ipecacuanha wine and occasionally small doses of sulphate of zinc. Provided there are no dangerous or severe complications requiring special measures, it has been found that each of these two modes of treatment proves successful in curing the great majority of cases; and we are told it is somewhat unusual, unless when easterly winds are prevailing, for children at Westminster Hospital to remain longer under treatment than from two to five weeks. In very young children and infants, a few doses sometimes of the nitric-acid mixture are sufficient to effect a cure; and if the little patients are carefully looked after, warmly clad, and properly fed, there is no recurrence of the disease.

In many hundreds of examinations Dr. Gibb has found the fact hold good, which he was the first to announce many years ago, that the urine in pertussis is almost invariably saccharine.

Foundling Hospital.—During the latter half of the year 1866, Dr. Julius Pollock tells us, an outbreak of whooping-cough occurred at this hospital. It commenced in July and terminated in September. There were in all 26 cases, the ages of the children being from three to six years. There were no deaths. The longest case was 103 days; the shortest 21 days; average, 50 days.

In the treatment the following were tried;—Conium, bromide of potassium, dilute hydrocyanic acid, alum, antimony, ipecacuanha, compound tincture of camphor, and oil of amber. Inhalation of the vapour of chloroform; painting with iodide liniment (B.P.) along the track of the cervical glands. Emetics were generally given at the commencement (ipecacuanha powder, ten to twenty grains), and occasionally in the course of the disorder if the chest seemed choked with phlegm.

The bromide of potassium was found to have no effect, nor did conium appear to have any advantage over opium. The iodine liniment to the neck did nothing. The vapour of chloroform seemed to check the spasm, but, owing to the difficulty of administering it, was not much tried. No

remedy appeared to shorten in any way the disease, but the most useful treatment was found to be the following:—To keep the room warm (50° to 60°); to give emetics at the beginning, and, when necessary, occasionally during the disease; to keep the bowels freely open; and to give the following mixture three times daily:—Dilute hydrocyanic acid, one to two minims; ipecacuanha wine, five to ten minims; compound tineture of camphor, ten to twenty minims; water, half an ounce.—Lancet, April 27, 1867.

# ON THE USE OF STRYCHNINE IN EPILEPSY. By Walter Tyrrell., M.R.C.S.

The action of strychnia in producing spasms and convulsions in the healthy subject, closely allied to, if not identical with, those of epilepsy. is, of course, known to us all. My object in the present paper is to call the attention of the Profession to the remarkable power which that drug possesses of controlling and altering those attacks in the epileptic. I made my first trial of strychnine in epilepsy in 1860, and was led to do so by reading a passage in Professor Van der Kolk's work on epilepsy published by the New Sydenham Society in that year. He states (see page 256) that he was led to try the effect of comia in epilepsy from observing the manner in which that drug controlled the convulsions produced by strychnia. He accordingly placed three epiletics under this drug. So early, however, as the second and third days, he was obliged to give up its use, as the attacks were so decidedly increased, both in severity and number. It was from this that I was first led to look to strychnia for the means of controlling epileptic convulsions. It being plain that conia, which controls the convulsions of strychnia, increases those of epilepsy, is it not probable that strychnia, acting, as we know it does, directly upon the spot we are now taught to consider the seat in which convulsion arises, may control the attacks in the epiletic? The first case in which I made use of strychnia occurred in the early part of 1860, in a young gentleman, aged 28, who had been for some time losing flesh and strength, and had been latterly subject to attacks of "petite mal." These culminated at last in a severe convulsive attack, in which he bit his tongue. After giving him rules for diet, exercise, etc., I prescribed for him the sixteenth part of a grain of the sulphate of strychnine, to be taken twice daily in solution. Under this treatment, which he continued for two months, he at that time entirely recovered, having no further attack, and improved in a most marked manner in health and strength He had a slight tendency to relapse after about a year, which yielded at

once to a return to the strychnine; since that time he has continued perfectly well. Though this was a favourable case for any treatment, yet its result was especially encouraging to me, as tending to prove that strychnia certainly did not *increase* the tendency to convulsions. Since that date I have treated sixty-nine cases of epilepsy with strychnine, some in America, some in England: and although in many cases I am unable to give the result, owing to my losing sight of the patient, I have seen as yet no case in which the strychnine did not exhibit a marked power in controlling and altering the convulsive attacks.

As my space is very limited, I shall confine myself to a few cases, choosing those in which the exciting causes of the disease appear to be different. In 1863, I saw a child, aged 6, suffering from a severe form of "petit mal." The disease had existed almost from birth. The attacks, which were very frequent, were unattended with convulsion, beyond an occasional stiffening of the right arm. She was semi-conscious during some attacks, perfectly unconscious during others. She sometimes fell. She had been under a variety of treatment—iodide of potassium, iron, valerian, etc. She entirely recovered under small doses of strychnine after one slight relapse.

Severe convulsive epilepsy, partial paralysis, resulting from masturbation; J.P., aged 26; six years epileptic, last two years almost idiotic; attacks, two or three in the day, varied much in intensity; often bit his tongue; partial paralysis of bladder and tongue. The effect of strychnine here was most marked. Fits at once diminished, both in severity and number. Paralysis decreased very much. Ultimately fits ceased; memory improved greatly.

S. T., aged 38, had epilepsy fourteen years. Fits come on once in a week or ten days, probably excited by some gastric irritation, as they often occur after meals. In this case, from the first taking strychnine, the interval was ninety-six days, when an indiscretion in diet produced a slight attack, the last. He continued strychnine for ten months. Is now quite well.

J. S., a clerk, unmarried, has led a very irregular life. The fits, which have continued at irregular intervals for six years, were dependent on irregular circulation probably. In this case I found the combination of strychnine and digitalis very useful. He had suffered from delirium tremens. He is now quite well.

M. B., aged 24. Epilepsy, dependent on menstrual irregularity. A strong plethoric girl, subject to epilepsy for six years. First occurred after a stoppage of menstruation from cold. Fits violently convulsive: interval irregular. Here strychnine, with aloes and antimony, produced an entire, cessation of fits.

I have lately seen E. H., aged 34. Attacks dependent on deranged menstruation. In this case the fits, which occurred every week or ten days, have been entirely absent since taking strychnine, now four months. Menstrual regularity restored.

The following case I give at length, as I think it will be allowed to have been a most unfavorable one for treatment, owing to the length of time that the fits had existed, and also to the early age at which they came on. I give the case in the words of Mr. Swinhoe, Surgeon, Swindon, Wilts:-" Thomas F., aged 20, first had convulsive attacks at the age of 13 months, which have continued at intervals ever since. Has never had less than two or three in the week. First seen by Mr. Tyrrell in August, 1866, at which time he frequently had two fits in the day. Ordered to take strychnine, which at first made him feel giddy, and twice a fit followed its administration; but by a little management and attention to bowels the strychnine became tolerated. He has now taken it in small doses for about five months. His present condition is as follows: -The fits, which never occur oftener than once a week, are more like fainting fits than epilepsy, and he is much better in health and more cheerful; in fact, in this most unpromising case the strychnine has proved of the utmost benefit." I may add that Mr. Swinhoe has another and most severe case under similar treatment, and doing very well.

In the following case, where the attacks are certainly due to derangement of circulation, the same change in the character of the attacks was observed; and from being violently convulsive they have become more like syncope, except that she is partially conscious throughout them:—J. K., aged 50, suffered from epilepsy twelve years; attacks very frequent; violently convulsive; circulation very irregular; suffers much from palpitation. Commenced strychnine November, 1866. Attacks now two in the week, formerly two and three in a day. (February, 1866)

Having now laid before you the practical effects of strychnine in controlling and modifying the epileptic attacks I will endeavour to show the manner in which I believe it to act. I believe that, to have convulsion at all, you must first have existing a peculiar nervous sensibility, and by nervous sensibility I mean a condition not of nervous strength, but of weakness—an increased sensibility, with a lessened power of control. This condition being present, I believe that convulsions may be produced by two great exciting causes:—

- 1. Derangement of circulation in and about the medulla oblongata.
- 2. Nervous irritation, either centric or centripetal, to borrow Marshall Hall's terms.

In our treatment of epilepsy hitherto, I think that we have been look-

ing too much to the virtues of individual drugs. At one time zinc has been in favour, at another nitrate or oxide of silver has been in vogue; and all cases were treated with one drug, however various might be the exciting cause. Now, I think that in strychnine we possess a medicine which acts directly on the seat of the disease, as a controller of the convulsive attacks; but, at the same time, I think that, in almost all cases, we must remove the exciting cause, which I think in most cases it is not difficult to discover and obviate. Thus, supposing the attacks to be induced by a deranged circulation in and about the medulla oblongata. I think that digitalis will be found a very effective remedy; and derivatives, counter-irritation, etc., will also be found of great service. I have also used ice to the neck with great effect. When the exciting cause results from nervous irritation, I think that, having discovered the set of nerves which are giving rise to the irritation, it is almost always possible to relieve their excitability. Thus, the pneumogastric is undoubtedly a most frequent seat of irritation, and it is in these cases where nitrate of silver, the sulphates of zinc and copper act so well. Again, where the nerves of the uterus convey the irritation through the spinal cord, bromide of potassium will be found useful; and so on, through all the known causes of irritation. I would sum up by saying that I believe that in strychnine we possess a drug which will always control the excitability of the medulla oblongata and prevent convulsions, but that to cure the disease we must also remove the exciting cause.

I have now gone as far as my limits will allow me, but I hope in a future paper to lay before the Profession other important points in the cause and treatment of epilepsy.—Medical Times and Gazette.

Great Malvern.

ON SOME OF THE USES OF BROMIDE OF POTASSIUM.

By C. L. Hubbell, M. D., of Troy, N. Y.

Among the remedies which have within the past few years been brought to the notice of the medical profession, there is scarcely one which, in my hands, has so seldom disappointed me, and so uniformly been of service in those diseases to which it is applicable, as bromide of potassium.

In an article published in the *Dublin Quarterly Journal*, in 1864, by Dr. McDonnell, of the Jervis Street Hospital, the attention of the profession is again called to this remedy, and its efficacy substantiated, by numerous cases of epilepsy in *males* and *females* successfully treated; and reference is made to Dr. Brown-Séquard, Dr. C. Bland Radcliffe and Sir C. Locock, all of whom had previously used it extensively, and with a great degree of success.

I propose to give the results of my own experience in its use, in epilepsy, in spermatorrhoa, and as a sedative in certain nervous diseases; and first of its effects in epilepsy, illustrated by a few cases.

CASE I.-Miss B., of this city, employed on a sewing machine in a collar factory, applied to me in the summer of 1863. She had one fit each month, usually a day or two before the appearance of the menses, which were neither profuse nor attended with great pain. She was otherwise perfectly well, but the fits were increasing in severity, and she had once fallen in the street. It was then nearly a year since the first at tack. I gave her at once a solution of the bromide of the following strength:—Potass. Bromid., \( \) i.; aquæ, f \( \) viij. Dose, a teaspoonful after each meal. At the next menstrual period, when at work over her machine, she was seized with a sudden dizziness, but there was no convulsion and no loss of consciousness, and in a few moments she was able to resume her work. Encouraged by this effect of the medicine, I advised her to persevere in its use. She left the city shortly after, and I saw no more of her, but was told by an aunt of hers living here, that Miss B. continued to take the medicine for four months, that she had never had a fit since, and was about to be married—this was just a year after commencing the treatment.

CASE II .- Mrs. J., of Green Island, aged 48, of melancholy disposition, had never had any children; came under my care first in November, 1864, complaining of pain in the head, dizziness, "hot flushes," and various other symptoms, which sometimes attend upon that period known as the "turn of life." She was at times very despondent, and would shut herself up for days at a time, refusing to see any one. I prescribed such medicine as seemed appropriate to her condition, and which relieved her to some extent, when one evening I was sent for in haste to see her, and the messenger stated that she had had two fits in succession. Judging them to be probably hysterical, I carried over with me some fluid extract of valerian, but on arriving at the house, found that she had fallen suddenly, and without any warning-was greatly convulsed-in short, that I had to deal with epileptiform hysteria. Furthermore, I ascertained upon inquiry, that it was just the period in the month (six months having now elapsed since the last appearance of the menses) when she would have been unwell, had she been regular. I then commenced with the bromide, in the same doses as in Case I. She had twice afterwards, at intervals of about a fortnight, a light seizure in bed at night; then for two months there was no recurrence of the fits. She then discontinued the medicine, and began to have fits again, not so severe as at first, but sometimes two or three in a week. I then urged her to persevere with

the medicine, and increase the strength, giving of the bromide—  $\frac{\pi}{3}$  ij- in water f  $\frac{\pi}{3}$  viij.—a teaspoonful three times a day. This solution she took steadily for five months, and never had convulsion after the first dose; is now at this date in the best of health and spirits.

CASE III .- M. A. M., a stout, healthy-looking, in telligent Irish girl, 19 years of age, came to me from Williamstown, Mass., in June, 1866. Her mother, who came with her, stated that she began to menstruate at 14 years of age, and always at each period had one severe convulsion, usually falling when at her work, and was stupid and prostrated for the remainder of the day. In this case I used the doses, and felt perfectly confident, from the pathology of the case, in assuring my patient that she would be cured. In her first letter, written after the next period, and when she had taken the medicine only three weeks, she says: "I had a light fit this time, and got over it very soon; I am much encouraged, and think I shall get well." In the second letter, she says; "I am certainly getting better. I had no fit, but felt dizzy for a few moments, and held on to the table. In a few moments I got over it. I shall go on taking the medicine. I have great faith I shall be cured, for surely I am better these two months." I heard no more from this patient until January 1867, when she wrote that she "had no fits at all, thanks be to God." To this I would add respectfully, and with all reverence, thanks be to God, and Sir Charles Locock, too, for it is to him that the unfortunate epileptics owe a debt of gratitude they can never discharge.

CASE IV .- E. S., of this city, clerk, aged 24, of good habits, but formerly used tobacco excessively; never contracted the habit of masturbation; since the age of 17 had severe epileptic fits, as often as once a fortnight, and at times twice a week: had frequently fallen in dangerous places, and sometimes been severely injured. He bears upon his face the sears of wounds received in his falls, and was known to several of our physicians and to our police as a confirmed epileptic. In May, 1866, when engaged in hoisting goods, he was suddenly seized, and fell from the third story of the store to the pavement beneath, a distance of thirty feet, fracturing his right thigh and one or more ribs. For a day or two his recovery was doubtful, but he got well, and with a good leg too. During his convalescence, Dr. Charles Freiot, his attending physician, advised him to try bromide of potassium for the cure of his epilepsy. This was in June. He took it but a short time, but enough to see that it exerted a controlling power over the disease. Owing to his lack of means, being out of employment, and the expensiveness of the medicine, he dis. continued it during the summer. In November last he commenced taking it again, buying a quarter of a pound at a time, and mixing it himself—one ounce of the salt to a half pint of water—a teaspoonful three times a day. From that time to this day he has not had the slightest epileptic seizure, and expresses himself as feeling well and in excellent spirits. He has not yet discontinued the remedy altogether.

I might relate other successful cases, but these are enough for the pages of your Journal, and enough to convince the most skeptical that, in cases of epilepsy, not having their origin in organic disease of the brain or spinal marrow, its bony walls or its membrances, we have a remedy which should be faithfully tried, and which will, in a large proportion of cases, effect prompt and permament cures. "Post hoc ergo propter hoc" is, I am aware, the argument which too often attaches to some new remedy; but this will, I think, stand the test, if administered in thoses cases to which it is applicable. It is not infallible by any means, nor is any remedy for any disease.

In a future number, I will relate some cases illustrating the power of bromide of potassium in spermatorrhoa, together with such conclusions as I have arrived at from its use during the past five years.—Boston Medical and Surgical Journal.

# THE TREATMENT OF PULMONARY CONSUMPTION.

BY J. HENRY BENNET, M. D.

Dr. Henry Bennet commenced by stating that the subject of phthisis is so vast in itself, in its pathological affinities and connexions, that it would require not one, but twenty meetings, to discuss it in all its bearings. He should, therefore, confine himself to the consideration of treatment, merely making a few preliminary remarks on the general pathology of pulmonary tubercle. Whatever the opinions entertained respecting the origin and nature of tubercle, it was now generally acknowledged that its deposit in the lungs and elsewhere was the result of defective nutrition, itself the result of a lowered state of vitality, hereditary or acquired. It is a sign of vital decay; the forerunner of eventual death, if unchecked; a mere mode of dying. Looking at the subject in a philosophical point of view, tuberculisation was not a scourge or pestilence, but one of the means by which Providence purifies the human race, weeding it of effete, worn-out organisations, unfit to perpetuate it in conditions of health and vigour. Were not such laws in operation, the human race would, in a few generations, become one of dwarfs, pigmies of misshapen diseased abortions. The attention of thinkers has been much directed to the struggle for life which pertains in wild nature. Effete, worn-out organisations are not allowed to exist. They either die from

want of power to procure the means of existence, or are exterminated by their natural enemies. But man has intellect; can provide for his own old age, and for the sickly existence of his sickly progeny. He has passions. desires shared by the weak as well as the strong, and thus society is full of effete organisations, which propagate the race as well their stronger brethren. But here the laws of Providence come in to correct our errors. The strong in life, in youth and vitality, give the same principle to their progeny; but the weak, the sickly, the old, cannot give what they have Their children are born with the seeds of disease and death in them, and die of tubercular meningitis, scrofula, and consumption. Thus is the integrity, the sanctity, of the human race preserved. If these views are correct, if the deposit of pulmonary tubercle is the result of lowered vitality, the treatment of the disease must be essentially sthenic. In the hereditary form, we have to endeavour to renovate, to prolong, a life naturally drawing to its close. In the acquired accidental form, we must, also, try to vitalise the economy, to restore the healthy play of disordered functions, and thus to arrest the fatal progress of the disease. To accomplish these ends, the application of the laws of healthy life, of hygiene, affords us infinitely more scope than mere medicinal agents. These laws must be rigorously applied. The patient must be removed from all unfavourable influences; must live in the country if possible, in the pure air night and day—a condition which can only be accomplished by allowing a current of air to pass through the room in which he or she lives. The functions of the skin must be steadily favoured by cold or tepid sponging daily and frictions in all conditions of disease. The food should be as nourishing and abundant as the stomach will bear. must be passed out of doors as much as possible, and that without fatigue. The disease being one of debility, there is but little strength left; and much exercise, often any active exercise, is prejudicial, disordering the digestive function and impairing nutrition. To enable this hygienic treatment to be carried out, and to avoid the moist cold weather of our winters, so unfavourable to the inflammatory affections which accompany the deposit and softening of tubercular matter, if the means of the patients admit of it they should be sent to a dry, cool, bracing, sunny climate, such as that of the sheltered north shore of the Mediterranean in the Gulf of Genoa. and not to warm, moist, relaxing climates like those to which consumptive patients were formerly sent under different doctrinal ideas. Although no medicinal substance can renovate, renew, exhausted vitality-although there is no panacea for such a disease—yet much may be done medicinally to restore healthy functional action, and to improve constitutional conditions. Thus, iron, phosphorus, acids, alkalies, bitters, etc., all find their application,

but only as adjuvants to hygiene and climate. They are merely like manure given to plants. A shrub dying in a city square from foul air, smoke, defective drainage, is doctored in vain with guano, bone-dust, etc., while it remains in the site unfavourable to its vitality. Transferred to the country, in pure air and good soil, these same agents may much contribute to its recovery. The inflammatory accidents which accompany phthisis -bronchitis, pleurisy, pneumonia-are mere phenomena, and only require secondary attention, although important in themselves, and destined perhaps to be the eventual cause of death. But, if the diathesis continue, they continue, whatever is done. If the diathesis can be modified, changed, organic vitality renovated, they stop and get well of themselves. Under the combined influence of sthenic treatment, aided by climate, hygiene. and medicine, the author has seen many cases of arrest and cure, since he himself has been a consumptive observer, and now looks upon the disease in its early stages as much more manageable than he formerly thought it and found it when actively engaged in large city practice.—The British Medical Journal.

#### TREATMENT OF QUINSY SORE THROAT.

The London Lancet publishes an interesting report of the treatment of tonsillitis adopted by physicians at the several metropolitan hospitals, from which we make a few extracts.

Dr. Anstie (Westminister Hospital) believes that in the suppurative variety two remedies only are of real value. If the case be seen early i. e., within forty-eight hours of the occurrence of decided pain, before the swelling has become definite in form, and more especially if there has been no shivering and the febrile action is but slight, the application of strong local astringents is almost certainly curative. The rough way of using this treatment is to order the patient to gargle every half-hour with a solution of alum. A more precise and effective use of the same astringent can be made by throwing such a solution, in the pulverized form, against the affected part. Another effective mode of local astriction is the application of tincture of sesquichloride of iron on a sponge carried by a whalebone, which may be firmly pressed against the part. The other remedy besides local astriction is the use, in suitable cases, of purgative medicine. If (and only in this case) there is reason to think the bowels are loaded, a brisk purge of any kind which does not produce exhausting serous exhalation will frequently give great and speedy relief:

If the disease has plainly gone on to the formation of pus, the above remedies are useless, and will only worry the patient. Our attention

should then be directed, Dr. Anstie believes, to soothe pain and to keep the swelling within bounds, while we also support the patient's strength. Hot fomentations and poultices should be applied around the throat, the patient should gently inhale the steam of boiling water, and he should be given strong beef-tea and small quantities of wine or brandy every four hours. In nine cases out of ten, the pus may be left to find a natural opening, and only the occurrence of serious mechanical dyspnæa, or the appearance of a tendency to the spreading of the suppuration, should induce us to use the lancet.

Dr. Wilson Fox (University College Hospital) treats ordinary cases of tonsillitis which present themselves within the first forty-eight hours of the invasion of the disease with a brisk mercurial cathartic, followed by a saline aperient draught. In cases which have even run a course of three or four days, the same plan is found by him to be beneficial, if the bowels have not been previously acted upon. Even in the early stages, unless the use of gargles gives much pain, he employs the following formula for this purpose: - Chlorate of potash, three drachms; nitrate of potash, half an ounce; glycerine, half an ounce; water, eight ounces. When seen early, this course is, in his experience, almost invariably sufficient to cut short the disease in a few days' time; and he scarcely recollects an instance where it has been adopted in which abscess has ensued. In cases of very severe swelling, he has occasionally found scarification useful; but he regards these as quite exceptional. If ulceration supervenes, either upon the tonsils or on the fauces, the solution of the nitrate of silver, of the strength of fifteen grains to the ounce, is, in his opinion, the best remedy; and it may be advantageously applied to the tonsils, when suppuration is not present, in cases where the swelling lasts longer than five or six days. Dr. Fox strongly deprecates the use of the solid nitrate of silver in the early stages of the disease.

Dr. Clapton (St. Thomas's Hospital) recommends the usual depletory remedies, but objects to stimulating gargles in the early stages. When a patient has been the subject of repeated attacks of acute quinsy ending in suppuration, the plan of applying a liniment of thin extract of belladonna just below and behind the ramus of the jaw has been found a most excellent one, rapidly relieving the pain and intense irritation, and in some instances cutting short the progress of the disease almost at once.

In incipient sore-throat, of whatever kind, Dr. Broadbent (St. Mary's Hospital) has for some time given small fragments of guaiacum resin—a piece to be kept in the mouth till dissolved, three or four times a day. The good effects have been very evident, more particularly in superficial inflammation of the mucous membrane; but tonsillitis has apparently

been arrested, and in patients subject to quinsy, attacks have been averted.

Dr. Headland (Charing-Cross Hospital) relies greatly upon chlorate of potash as a gargle, and mild magnesian purges. None of the physicians think it necessary, except in extreme cases, to use the lancet.—

Medical Record.

# A SET OF FALSE TEETH SWALLOWED AND PASSED THROUGH THE BOWELS.

#### BY THOMAS GALT, M. D.

A few weeks ago, I was summoned in haste to see Mr. W., a respectable resident of this city, and found him much agitated, and suffering acute pain in the stomach. He is subject to epileptic fits, and stated, that on the previous evening, just before retiring for the night, he had an attack, which lasted ten minutes. After recovering, he suffered considerable pain in the throat, which was soon transferred to the chest, and then to the stomach, where it still continued. He did not feel alarmed until in the morning, when, on search being made for his false teeth, they could not be found, and he had now become convinced, that while in the fit, he had swallowed them.

The teeth, seven in number, four on the right, and three on the left of the incisors, (which latter were sound and in their places,) were on a gold plate, extending almost entirely around the upper jaw, and were kept in position by means of clasps embracing a molar on each side. These clasps, extending only about three-quarters around the two teeth, were of course open, presenting tolerably sharp prongs at each extremity of the plate, rendering them liable to catch and effect a lodgment in the intestines.

These statements being corroborated by his family, I concluded he had swallowed the teeth and recommended a course of mild cathartics; meantime to abstain from solid food, and drink aboundantly of soups, broths, and slippery-elm water.

I heard nothing more from the patient for several weeks, when being called to see another member of the family, I learned, that about a week after my former visit, he had passed the plate and teeth entire, and was now wearing them. The trip through the primæ viæ not having changed their form, or impaired their usefulness.

He stated, that as the plate advanced, he suffered severe pain at different points in his bowels; and that on such occasions, he would lie down, change his position, and manipulate the abdomen until the pain ceased.

I send you this statement of the case, thinking it might interest some of your readers, and as showing how formidable an obstacle may be received into the stomach, without producing any serious disturbance. Philadelphia Medical and Surgical Reporter.

# HEMATEMESIS IN A CHILD AGED THREE YEARS AND TEN MONTHS.

Hæmatemesis is of such rare occurrence in young children, that the following case, for the particulars of which we have to thank Mr. Sydney C. Austin, deserves, we think, to be placed on record. The child had been so very ill-fed, that his blood had become considerably impoverished, and a scorbutic diathesis had been engendered, to which Dr. Sieveking was inclined to ascribe the hemorrhage.

Charles Dickenson, aged 3 years and ten months, was admitted into St. Mary's Hospital on June 15th, 1867. His mother stated that he had diarrhee for a fortnight, and passed blood in the motions until the 11th of June. The child was excessively weak; and, as she was very poor, she could not get nourishment for him—in fact, she and her children had been half-starved for some time. On June 12th, after taking some tea, he was very sick, and vomited about an ounce of dark blood. The vomiting continuing after every meal, she brought him to the hospital.

Soon after his admission he vomited a small quantity of bright blood. He was very much emaciated, and very restless. Pulse 110. The tongue was coated with a dark red stain in the centre of the dorsum, which disappeared in a few days. A mixture was ordered to be taken every four hours, containing ten minims of dilute sulphuric acid, with adrachm of syrup, and three drachms of pimento water. He was directed to have simple diet, with isinglass-jelly, iced milk and broth.

June 16. He was better to day. He still vomited after both liquid and solid food. The quantity of blood was very small. There was pain on pressure over the epigastrium. The child did not sleep, crying a good deal. Two minims of tincture of opium were added to each dose of the mixture.

17th. He slept well in the night. He brought up about six drachms of dark blood this morning after breakfast. The tenderness over the epigastrium was increased. Pulse 114.

18th. There was less tenderness on pressure. He still had vomiting; but the quantity of blood was very small.

19th. There was no pain in the epigastrium. There was vomiting still; but no blood at all to-day.

20th. He was much better; more cheerful. He kept his breakfast down, and only vomited once during the day—no blood. Pulse 108. The acid mixture was discontinued, and a powder of a grain of tannic acid and five grains of sugar ordered to be taken three times a day; he was ordered one drachm of cod-liver oil three times a day.

21st. There was no vomiting to-day. He asked for more food.

23rd. The powder was continued. Half ordinary diet was ordered. He had no sickness.

26th. He went out quite well, having gained flesh considerably.— British Med. Journal.

#### ON CARBOLIC ACID AS A GARGLE IN DIPHTHERIA.

Charles Sedgwick, Esq., Hollingbourn, Maidstone, England, in a communication to the *Medical Times and Gazette*, on earbolic acid in diphtheria, says:

I usually give it in the form of a gargle, but in children, by swabbing the throat out freely with it on a piece of sponge. When the disease has been taken early, I have not failed in a single case, but have lost some where it had gone too far for medical treatment to be for any service, Carbolic acid has a decided effect upon the false membrane thrown out. The following is the form I usually prescribe: R. Acidi carbolici, Mxx; Acidi acetici, f. 3 ss; Mellis, 3 ij; Tinet. myrrhæ, f. 3 ij; Aquæ, q. s. M.

Ut fiat gargarissima, f. 3 vj.

The carbolic and acetic acids to be well shaken together, the mel. to be added with the aquæ gradually. With it I usually give tinct. ferri and quinine.

# QUININE IN THE TREATMENT OF CROUP.

Dr. D. W. Williams, of Liverpool, communicates the following to the British Medical Journal on the use of quinine in croup.

In 1862, I examined the tracheæ of three children who died of croup, and found the mucous membrane covered with a yellowish white substance ike gruel (muco-puriform matter), the membrane itself been reddened. A crow-quill could have been passed down the tube without touching the substance which lined its walls. There was nothing like blocking, nothing like tubes of false membranes (lymph), yet my little patient died of slow suffocation.

While thinking of these cases, one of my own children took croup. The usually remedies were adopted; but in a few hours the result could be but too easily foretold; she was slowly choking. The restlessness and anxiety so well known was great; and I asked myself these questions:—
"Is this child dying from inflammation and blocking of the trachea, or from a blood-poison, which manifests itself in local inflammation and spasm?" Inclining to the latter opinion, I gave her a grain of quinine, a large dose for a child twelve months old. In twenty minutes, the relief was surprising; the restlessness, etc., abated. In an hour, a second grain was given, and the child fell asleep, and made an excellent recovery—the quinine being continued in smaller doses. Since this, I have treated several cases in the same way, with similar result. In bronchitis and pneumonia also I find quinine of great value when this distress is out of proportion to the amount of disease.

# Midwifery and Diseases of Momen and Children.

#### CHLOROFORM IN MIDWIFERY.

At a meeting of the Obstetrical Section of the British Medical Association the following conversation took place, which I jot down from memory, thinking that the publication of it will prove instructive and useful to many of my country brethren.

Sir James Simpson, having consented to answer any questions put to him on the subject of the administration of chloroform, commenced by stating that at the present time nearly every woman in Edinburgh was delivered under the use of chloroform, and so few bad results had occurred that he could not now refuse to any case the boon provided by science for the relief of suffering humanity. He was then asked how he used it. He replied that every one had their own favourite method; a very general way was by spreading a thin towel loosely over the face and dropping the chloroform on it. For his part, he used a napkin, folded up as a cylinder, dropped the chloroform on the interior, and admitting more or less air by opening or closing the end of the cylinder remote from the mouth; he always rubbed a little fine oil over the skin of the face, to preserve it from the irritation produced by the vapour of the chloroform.

Question.—Have you known it to produce convulsions?

Answer.—When I first used it I was rather afraid of this result. But, in the first place, I never met this occurrence; and secondly, I soon found that Dr. ———, of Glasgow, introduced it as a remedy for this very affection, and its use in such cases has gradually extended. My experience would lead me rather to look on it as a prevention than a provocation to the occurrence of convulsions, and naturally so when we consider how much of the tendency to convulsion depends on the nervous excitement and irritation of unrelieved labour.

Question.-What about puerperal mania?

Answer.—I cannot recall any case having occurred where it had been used, but I will tell you a curious circumstance, knowing how extensively it is used in Edinburgh. I visited the great Lunatic Asylum of the City of Morningside, and on enquiring, found that there were eleven cases of puerperal mania under treatment. I traced out the history of each ease, and found that not one of them had been confined under the use of chloroform. Duncan and Flockhart, the chemists in Edinburgh, prepare 1400 doses of chloroform daily, now, if as many doses of salts were distributed, we would have had as many untoward events from diarrhœa as we have had from chloroform. It should be always given in the recumbent position, as most of the deaths that have followed the use of chloroform occurred in trifling cases where it was given in the upright position.

Question.—Is there any means whereby we can distinguish chloroform that is unfit for use?

Answer.—Not that I know of. It is the best way to go to the best shop.

Question .- But if the best shop is eighty miles away?

Answer.—It keeps very well for a long time, several months. (Here Macnamara stated that good chloroform should smell sweet and free from acid, and if dropped on the hands should leave no smell after a few minutes.)

Question.-When do you begin to give it?

Answer.—Well, I can't exactly tell you. A good rule is whenever the patient begins to weary of pain. She should be allowed to inhale it only when in pain, and not during the intervals.

Question .- Have you found it promote hæmorrhage?

Answer.—I have not. The moment the head is born you should sweep away the towel and use the chloroform no longer. If you adopt the plan I do, I believe it is an old Dublin plan, of following down the contraction of the uterus with the hand while the child and placenta are being expelled, and holding your hand for some time on the contracted uterus, I believe you will not meet more cases of hæmorrhage with the use of chloroform than without it. (Here Dr. Beatty entered the room,

and bearing testimony to the great advantages he had found in its use, being one of the first who used it extensively in Ireland; yet, he thought that he was satisfied that its use did, in some measure, predispose to homorrhage, and that, therefore, about the close of every case in which he used it he gave a dose of ergot).

Question.—Does it delay labour?

Answer.—No, on the contrary. I think I have often saved much time by its use.

Here Dr. Macnamara bore strong testimony to the great value of chloroform generally, and eulogized it as a boon of mercy to mankind, and stated that it appeared to him that the more wretched the sufferer the greater the need for its use.

Question.—Are there any particular symptoms indicating that chloroform is taking effect, so as to guide one how far they should go with it?

Answer.-Nothing particular.

A gentleman here asked Dr. Macnamara if he had ever observed a tendency to spit or expectorate when the chloroform was taking effect. Dr. Macnamara said such was the case, but his remarks were rendered inaudible by a movement to break up.

Sir James Simpson stated strongly that he never had heard indecent language from patients taking it, in which he was supported by Dr. Macnamara, but persons who understood foreign languages often used them.

—Medical Press and Circular.

# Materia Medica and Chemistry.

NITRATE OF POTASH IN THE CURE OF INTERMITTENT FEVER.

Dr. Sawyer, of Illinois, states that he has used this salt with great success in the cure of intermittent fever, even where quinine has failed, He administers it in ten grain doses, with  $\frac{7}{5}$  ss. of brandy or water: or if more agreeable to the patient, the powder may be placed on the tongue and allowed slowly to dissolve. He says "I deem it a specific in ague, and have never failed to arrest the paroxysm, if uncomplicated. You will also find that the patients are less liable to relapse than when cured by quinine. In the cold stage, if administered in a full dose, and the patient be placed in bed and covered with blankets, he will in a few minutes experience considerable heat, which will be followed by copious perspiration, and every unpleasant feeling will vanish." The action of this medicine more closely resembles nature's mode of curing the disease in ques-

tion than any other plan, as she cures by copious diaphoresis; or, in other words, by elimination.—St. Louis Medical & Surgical Journal.

## MODE OF ADMINISTERING CHLOROFORM INTERNALLY.

The best vehicle for the administration of chloroform is milk. Those who have used it state that nothing more acceptable can be desired by either patient or physician. — Richmond Medical Journal, June, 1867.

#### CURARE IN EPILEPSY.

Dr. Benedikt informs the Vienna Medical Society that the subcutaneous injection of curare has a favorable influence over epileptic diseases. A man 20 years of age had had epilepsy since he was 9 years old. During five months he was subjected to curare injections in hospital. For the last fifteen months he has had no return of the fits. Four similar cases, equally successful, were related by Dr. B. The injections were used three times a week under the skin in the neck, an eighth of a grain of commercial curare being used at each operation.—British Med. Journal, June 30, 1866.

Professor Depaul remarks that while abundant attention is given in obstetric treatises to the treatment of healthy new-born infants, and those who are seemingly still-born, little space is devoted to the care of weakly. This want he endeavors in part to supply. He thinks that authors have not laid sufficient stress on certain deceptive appearances, which seem to imply that the infant is out of danger because it takes the breast, and seems to suck.

A new Anæsthetic has been introduced into London, within the last few manths, called the "Ter-Chloride of Carbon." It has been given in many instances, and found to act well. We will notice it more fully in the next number of the Journal.

# Canada Medical Journal.

MONTREAL, SEPTEMBER, 1867.

#### THE APPROACHING MEDICAL CONVENTION AT QUEBEC.

The first of the resolutions about to be submitted at the approaching Convention for the consideration of the profession of Canada, is the following: "That in the interest of the public, and the Medical Profession, it is desirable to adopt such means as will insure an uniform system of granting license to practise Medicine, Surgery, and Midwifery, throughout the Dominion of Canada." This, as we before remarked, is in every way desirable, but we regret to observe a proposal to interfere with the established rights and privileges of the Universities and Colleges.

Is it presumed that a test examination before members of any profession, who are unconnected with the schools, who have no interests at stake, would be a more just, equitable, and at the same time a more perfect, examination than one passed before the faculties of the Univertities? We maintain without fear of contradiction, that the Universities have well performed their work. It is in every way their interest to elevate the status of their particular school; the examinations are watched over by each and every graduate, who has an interest in keeping up the standard of his college. Every incompetent man permitted to pass by the faculties depreciates just so much the value of the diploma or degree of each individual graduate who preceded him. This is well known by all graduates, and if, as is inferred by the ungracious attempt to deprive the Universities of their vested rights, any faculty of any University, were to pass unqualified men, the alumni of that University have the power and would exercise it, of sending representatives to their corporation boards, or to their convocations, and would outvote the faculties and prevent the giving away or "sale of degrees" a charge made some years since against the Faculty of Medicine, McGill University, by no less a person than Dr. Dickson, who then held the position of president of the

Medical Council of Canada West. The actions of men with little minds are more amusing than hurtful, and this snarl of the mouth-piece of the Upper Canada Medical Council was hardly worth a passing comment.

The General Council of Medical Education and Registration of Great Britain, is composed of representatives of each of the Universities and Colleges in England, Scotland and Ireland, and also of a certain number from each section of the kingdom, nominated by her Majesty, with the advice of her Privy Council. This body exercises a general supervision, they recommend to the Educational Institutions, certain changes which may be deemed necessary or advisable, both in the status of preliminary education and in that of the professions of Medicine, Surgery and Midwifery, but the vested rights or privileges of the schools are not interfered with. The Council, however, possesses the power of suspending from registration privileges any Institution which does not conform to the laws enacted by that body, as bearing on educational status. As a result, a high order of general education will be necessary and will become uniform throughout Great Britain.

It appears to us that a similar Law adapted to our country is what we require; a bill based on the amended Imperial act, and submitted to the Legislature of each Province. It is much to be regretted that the higher grades of educational progress are not under the supervision and care of the Commons of Canada. It is all very well in its way in a country like Canada in which the people are divided by Religious Doctrine to give to each section the right of educating their young in their own peculiar tenets, but in the higher branches of education, more especially the professions of Law and Medicine, wherein no doctrinal points are raised, we do think it would have been wiser to have left them specially to the General Legislature, as in the case under discussion it is unquestionably a difficulty which will not be overcome, and we feel convinced that uniformity in system is a thing not to be looked for or expected.

There is one clause in the amended Medical Act of Great Britain which we copy.

"Penalty for the assumption of titles, &c., by unregistered persons practising Medicine or Surgery.—If any person practising medicine or surgery, or engaged in the cure or treatment of diseases or injuries, not being registered under the Medical Acts, takes or uses any of the designations enumerated in Schedule (A) to the Medical Act (1858,) as amended by this Act, or by any other of the Medical Acts, or the designation of Physician, Surgeon, Doctor, or Apothecary, or any other designation used by or used to distinguish duly qualified prac-

titioners of medicine or surgery, or any class thereof, or the designation of Professor of Medicine or of Professor of Surgery, he shall for every such offence be liable on summary conviction to a penalty not exceeding twenty pounds."

The law under which the profession in Canada is governed is very defective, and is no terror to wrong doers. It is indefinite and inoperative; a conviction under the law as it stands for practising Medicine, Surgery or Midwifery without a license, is next to an impossibility; as a result we have throughout our country, but more especially in the larger cities, all sorts of quacks: Thompsonians, Steam Doctors, Bone Setters, Eelectics Homeopaths, Tumbleties, Electricians, Vacuo Vacuas, (a novel genus,) Phrenological itenerant lecturers, and every shade and degree of wonder monger all clamoring for public favour and public support. It is with a view of remedying this condition of things that the proposal has been made to endeavour, if possible, to secure an uniform system of granting license to practise in the Dominion.

It must be borne in mind that this does not apply to persons who have submitted to examination before any of the several examining boards. The question of want of efficiency on the part of the Universities is not mooted; they have not habitually passed unqualified persons; the examinations of these several bodies is of a higher grade than that hitherto exacted by the authorized licensing boards in the Upper and Lower Provinces of Canada. We cannot see the utility of seeking to deprive the Universities of time honoured customs and privileges which they have held and exercised with credit and faithfulness, and by which the very character of our educational system has been elevated. It is a matter of proud satisfaction to us, as Canadians, that the Universities of McGill College, Montreal, Queen's College, Kingston, University College, Toronto, and Victoria College, Cobourg, are recognised by the colleges of the Mother country, and their certificates admitted on a par with those received from any of the educational institutions of Great Britain. Why then should we seek to degrade our own institutions. We doubt much the power of the Legislature to abrogate those privileges but admitting their power to take away those rights, would it be expedient? Is it right to reduce our condition to a state of educational chaos? What we do require is a board or Council of general supervision to act as a check on all our institutions, to insist on a regular system of preliminary education and also to supervise the method of teaching and examination, but, not to interfere with what is working well, and with what has hitherto clevated the status of our graduates. Furthermore, what we require is a board having the power of arresting quackery and humbug, and driving it

from our borders. This can, in our opinion, be best secured by a General Council of Medical Education and Registration having all the powers and authority in Canada which is held by the Medical Council in Great Britain.

#### MEDICAL NEWS.

#### DEATH OF PROFESSOR VELPEAU.

The Paris Faculty of medicine has been deprived of one of its most eminent members. Professor Velpeau breathed his last on Saturday, the 24th inst.

Velpeau was born in 1795, and was the son of a country blacksmith, and in his early years plied his father's trade. He received no higher education than what was usual in his station of life. When a lad of fifteen he was admitted for some slight disorder as an indoor patient at the Hospital of Tours. This trifling circumstance had a decisive influence upon his whole career. During his convalescence he acted as a servant in the wards of the Hospital. The quickness of his intelligence, and the interest which he seemed to take in everything connected with Medicine, attracted the attention of Bretonneau, under whose care he was placed. "Would you like to be a Doctor?" said he one day to this clever lad. "Of course I should," was the reply. Young Velpeau was send to school at Bretonneau's expense, and, without ever becoming a first-rate classical scholar, soon acquired enough Latin to pass the examination which it was indispensable to get through before commencing his Medical studies.

He entered that Hospital as a student which he had formerly entered as a patient, and soon took his degree as an officier de santé. (a) He then paid a short visit to Paris, to see the great city before settling in practice in his own native place. But when he beheld the immense advantages which Paris held out to all those who wish to acquire instruction, a change came over his spirit. He gave up all idea of ever returning home; and, in spite of poverty—in spite of neglect—he began to work his way up. He gave lectures on anatomy, got a few pupils, and managed, by strenuous exertion, to keep body and soul together. His first great success was his nomination to the Prosectorate of the Faculty, which enabled him to improve his anatomical knowledge and establish his position as a rising man. The generous patronage of Profession Cloquet

greatly helped him on at this time. He rapidly obtained his Doctor's degree, and became successively Surgeon to the Hospitals, and Assistant-Professor at the Faculty of Medicine.

In 1830, the Professorship being thrown open to competition, Velpeau at once entered the lists. He went in five times before succeeding, and each time he produced a book on the subject taught in the chair for which he was a candidate. At last, in 1835, he was appointed to the chair of Clinical Surgery and entered the Charité, in which he continued to lecture till he took to his bed, never to rise again.

The disease under which Velpeau had been suffering of late was an enlargement of the prostate. He had only been confined to this bed for a few days when he was seized with pneumonia, which speedily proved fatal. His last words were, "il faut toujours travailler, mes amis."

Among the causes of death given in the June report of the Lowell, Mass., city physician, was "Homœopathic foolery."

Forty years ago surgeons and doctors generally officiated as teethpullers whenever occasion demanded. In 1820 there were but thirty practising dentists in the United States. In 1850 the number had increased to 2,923, and at present there are about 5,000 regular dentists.

Nitrate of silver stains may be removed from the hands or clothing by the combination of tineture of iodine and a solution of hyposulphite of soda.

#### LOBELIA IN ASTHMA.

The lobelia inflata, a drug much praised and abused by quacks and somewhat slighted by the profession, is in constant use among the outpatients of the City Hospital, for diseases of the chest. In doses of ten minims, three times in the day, it appears frequently to produce the most admirable effects in cases of chronic bronchitis, complicated with a tendency to paroxysmal asthma. It is commonly given in conjunction with sedatives, expectorants, or stomachies, often agreeing remarkably well with the latter. Patients taking it frequently complain of much nausea and sense of depression during the half hour or so following each dose, but it seems on the whole to decidedly improve the appetite and digestion. If the nausea be excessive, combination with a few drops of dilute hydrocyanic acid is often useful. —Medical Times & Gazette.

# CANADA

# MEDICAL JOURNAL

## ORIGINAL COMMUNICATIONS.

Lectures on the Pathology and Treatment of Joint Diseases. By Louis Bauer, M. D., M. R. C. S., Eng., &c.

#### IV.

### PROGNOSIS OF JOINT DISEASES.

From the preceding remarks of the discourse we may sum up the following prognostic axioms.

From the collective character of joint affections, we must come to the conclusion that they constitute formidable diseases,

In their respective courses, they are slow and protracted, often of years duration.

In their commencement and development they are insidious, and may have proceeded to considerable disintegration of normal tissue before the patient becomes aware of the impending difficulty.

The restitutive powers of some of the articular structures are of an indifferent character, owing to the imperfections of their nutrition.

In as far as the osseous structure is concerned, recovery depends on the gradual destruction of the affected parts which of course is necessarily tedious.

In most joint diseases the affected structures undergo changes more or less disqualifying them for the performance of their respective physiological offices, thus either impeding or annihilating the usefulness of the articulation.

The suppuration of articular cavities leads to their perforation, to extensive subfascial burrowing of pus, and not only involves the extremity, but the constitution at large.

Reflex pains and spasms accompanying joint diseases are of the most violent and torturing character, upsetting rest and appetite, placing the very existence of the patient in jeopardy.

Caries of the articular faces may cause so copious a drainage as to gradually bring the patient to heetics, pyæmia and multilocular abscess in the vital organs.

Finally, malposition, deformity, false and true anchylosis may terminate these diseases, and disable the patient for the rest of his life.

All this should be borne in mind when taking charge of cases of this description, and our prognosis should be guarded under all circumstances, however slight and insignificant the cases might appear at the first glance; for the objective symptoms are not a reliable barometer of the actual condition with which one may eventually have to grapple.

Notwithstanding all I have said in this respect, the prognosis of joint diseases is infinitely better to day than it was fifty years ago. The present generation has achieved a clearer insight into the physiological and pathological character of joints than our professional ancestors; it has successfully rid itself of errors, heresies, and notions which obscured the unbiassed clinical understanding of this class of diseases; and since then we have steadily improved in therapeutic efficiency and self-reliance. What was formerly a noli me tangere, has become a coveted object of diligent investigation and treatment. And the results of our cherished efforts are in every respect gratifying to the professional pride, and afford reasonable satisfaction to the patients concerned.

It will scarcely be necessary to enter into prognostic details, inasmuch as they may be inferred from the previous section of these lectures, or may be yet especially alluded to under the succeeding heading.

#### V

## TREATMENT OF JOINT DISEASES.

The most important proceeding in this direction is a thorough and systematic examination, comprising both the antecedents of the patient and the present clinical aspect of his disease. In reference to the former, the state of health of his immediate and remote ancestors should be ascertained, as it might possibly affect the prognosis of the case. Next to this is the previous history of the patient, whether he has passed through the ordinary infantile diseases without sequelae; whether the previous state of his constitution and health has been strong and vigorous, or otherwise. It might be as well to inquire into the character of his temperament, mode of living, residence, domestic surroundings, &c., in order to form an approximate idea as to the status and vigor of his system. The next object of inquiry would be the probable causation of the impending disease. In this respect, gentlemen, I should advise to be searching and persevering, for most parents know so little about it, that we are obliged to sharpen their memory. They will assign the most trivial

causes, and harp upon the same with great pertinacity, simply because the true occasion is in the past, and has slipped their memory, whereas trivialities are brought forth because they happened at a time, soon after which the disease assumed form and importance. I have been startled by the simplicity with which even modern writers on the subject, have allowed themselves to be stultified with the most innocent and harmless occurrences, as for instance "sitting down on the grass," or "on a cold stone," or "having run about a good deal," &c. I cannot persuade myself that such trivialities can constitute legitimate and reasonably acceptable causes of joint diseases, even if they are printed over the signature of a respected surgical name.

In closely investigating further, you will learn that there have been traumatic influences of some kind or other, more or less direct upon the articulation, and if nothing of the kind could be traced, I would not hesitate in assuming the same, if the previous health of the patient had been untainted with manifestations, which can be justly ascribed to chronic nutritive derangements and a vitiated domestic atmosphere. That a traumatic accident has by weeks and even months preceded the actual disease is no argument against its injury, since we know from the preceding remarks, that more or less time will necessarily intervene between the accident and the disease, to bring about those changes in the structures, which can attract attention. Moreover, it is mostly the local pain and the disturbance in the use of the joint, before any notice at all is taken, and either of them are but mere remote results.

We may then proceed with a general inspection of the patient; his general appearance; as to the present state of his health, and the actions of the respective systems. If the patient presents pallor, general attenuation, and prostration, you may rest assured that the disease has far advanced, and shaken his general health by the incidental reactions upon rest, appetite and nutrition.

The patient should then be undressed so as to obtain a full view of the articulation, and the affected member in general; we ought to note its circumference and position, and compare it with the other extremity; institute locomotion, and carefully observe how the joint is used and the limb is put to an account. If the patient should limp, we ought to determine whether the limping depends on immobility or tenderness of the affected articulation, or on malposition, or deficiency in the length of the member.

In fine the patient should be placed on a suitable table, so as to be accessible from all sides, and be put under the full influence of an anæsthetic, that volition may be suspended and the rest of the examination be

painless. These preparations I regard as essential, to obtain a full knowledge of the character and extent of the disease.

I do not deem it necessary to enter into the full details of the examination with which you are already acquainted. But a few points deserve special attention. In the first place, we have to ascertain the condition of the bones constituting the affected joints, and find out whether the disease has originated remote from the joint, in the periosteum or in the bone itself. In either case, we shall find by comparison, that the circumference of the bone is increased and the adjacent tissues more or less infiltrated, its surface be uneven, pressure upon it be tender, and by bending the bone, we occasionally find that it has lost its elasticity and hardness. We have next to direct our attention upon the condyles, compare their size, elasticity and sensitiveness with the corresponding condyles of the other limb. Frequent practice will enable us to discern changes which are easily overlooked and ignored by the novice. There is a certain degree of elasticity in the condyles, which is lost by the morbid alterations, even the increased tenderness of the bony structure becomes manifest, though the patient be in anæsthesia. On moving the joint carefully, we ascertain the degree of mobility and the changes that may have taken place in the articular surfaces. Polypiform growths of the synovial membrane may thus be discovered, when they are too small for the touch of the finger. Crepitus would be the evidence of destruction of cartilage; its absence proves nothing to the contrary, as we have learned on a former occasion. If the joint allows an undue lateral or rotatory movement, we may infer that the lateral or intermediate ligaments have become destroyed, and if combined with crepitus. it may indicate that the articular faces have been materially flattened and changed in form. If the periarticular tissues of a joint are largely infiltrated, and the joint itself is either dry or contains but little fluid, we have the more reason to suspect bone disease, and centre our attention upon the condition of the osseous structure. A distension of the articular cavity without induration of the periarticular structures, indicates synovitis.

During the anæsthesia, we can but ascertain whether the malposition is produced by interarticular adhesion or muscular contractions, or both, and, moreover, whether the contracted muscles still retain their expansibility, or have more or less lost it. If there are sinuses about the joint we must try to discover their course and termination, though they may be very circuitous. I have found pewter and elastic probes more available for this purpose than silver ones; and large probes better than the finer ones. In this way, gentlemen, we shall arrive at a clear under-

standing of our case, and establish a reliable diagnosis as a basis of therapeutic action.

The first stage is the disease but virtually. The affected structures are but in a state of congestion and hyperaemia with incident tenderness, there are no substantial changes as yet, and by at once taking prompt measures, we may succeed in obviating future mischief. The earlier this is done the surer we may count on success. Nay more, I should consider myself justified in treating every injury to the joint as a virtual affection of the same. A few weeks restraint is nothing in comparison with those terrible maladies that may eventuate from apparently insignificant causes. But with all the precautions imaginable, and with the most appropriate and prompt treatment, we are not always able to prevent the consequences, more particularly if they refer to injuries of the periosteum and the bony structure.

The very first therapeutic axiom in the treatment of joint diseases is rest, absolute and unconditional, and the next, proper position of the affected articulation. The efficacy of these two is greater and more reliable than the entire antiphlogistic apparatus, and they generally suffice to meet the exigencies of the first stage.

The affected joint is to be rendered immovable by appropriate bandages, materials, or special appliances; and if the affection concerns the lower extremity it would be additionally advisable that the patient takes to his bed and thus get rid of the superincumbent weight upon the affected joint. The ordinary way of rendering a joint immovable, is by hardening bandages, by leather, gutta-percha, wooden, wire or light metallic splints, that are adapted to the form of the extremity. If the morbid condition of the joint is not far advanced, so that we may not require to inspect the articulation often, and thus disturb the dressing. stiff bandages are certainly preferable, otherwise, splints should be chosen. The stiff bandages are made by impregnating the outer portion of the dressing with flour, starch, or dextrine-paste, plaster of Paris or the liquid glass. Inasmuch as these bandages are more or less impermeable to the perspiration, it is necessary to first surround the extremity with a well applied flannel bandage, under which the unevenness of the surface should be filled with cotton wool. How the rest is done, is indeed very indifferent, as long as it fulfills its object. Until the bandage is perfectly dry, it would be advisable to fasten a splint to the member. In some instances it may be advisable previous to the application of the bandage, to apply an appropriate number of leeches. so as to reduce the hyperaemia and stasis, the effects of which are, however, but transitory. The fixture of the joint should immediately follow.

Except in recent injuries, the application of cold is rarely demanded, but if resorted to, it should be efficiently applied in the form of ice bags, for which purpose one part of the joint may be relieved from the bandage and exposed to the action of that remedy.

The position of the affected joint should be such in which the patient is most comfortable and at rest. It is chiefly governed, however, by the tendency of certain muscles to contract, and therefore, should at once be placed in an antagonistic position. If you remember that portion of our discourse in which I referred to muscular contraction, you will know to choose the position which is most appropriate. In adopting the same, muscular contractions and malpositions will thus be obviated. Some surgeons advise to give the extremity such an angle as will be most conducive to its usefulness. We have nothing to do with that object at this juncture; our object is to relieve the disease and thus preserve the entire usefulness of the joint; their advice is in place when the joint is about anchylosing. The straight position of the elbow joint gives more relief than the flexed one, irrespective to the fact that the latter favours the contraction of the biceps and brachialis. And a straight limb bears more vertical weight than a bent one, and may be used to greater advantage in locomotion.

The same treatment holds good in perforating wounds of the joints, with the additional rule that the wound be carefully cleaned, its margins properly approximated and united. In this way I have seen many an incised and punctured wound close by first intention, without any inconvenience whatsoever. Different is it with torn and contused wounds, where the first intention is but exceptional, and suppuration the rule. Immobility and proper position of the joint, are likewise the chief indications here, and should be scrupulously observed, but the dressing should circumvent the wound and leave it accessible to local treatment.

In using dextrine, starch and plaster of Paris bandages, that part in the neighbourhood of the wound should be protected by a coating of varnish so as to render it unimpregnable to the discharge.

I rather prefer to secure the immobility of the joint by wire and metallic splints (tin or sheet iron) inasmuch as they will permit the use of permanent bath, which I consider invaluable in the treatment of such wounds. We owe the introduction of this remedy to B. Langenbeck, to whom surgery is indebted for many and valuable improvements. If suppuration of the joint ensues, you will do the most for the recovery of your patient by giving free vent to the discharge, and by keeping the suppurating surface in a very clean condition. By these means, and eventually by free incisions into the articular cavity, I have saved many a patient.

There is hardly any necessity for medication, unless incidental derangements demand therapeutic interference. The local treatment suffices to check and ameliorate the articular disease; time and patience accomplish the rest. Beyond those local remedies I have mentioned, nothing else is required at this juncture. From painting the articulation with tincture of iodine, I have seen no benefit; and fly blisters interfere with the fixture of the joint, cause a needless irritation to the patient, and sometimes give rise to reflexed muscular contraction, as I have seen.

IN THE SECOND STAGE the indications of treatment become more diversified. The pathological character of this period is expressed by structural invasions of a more decided nature; by more copious infiltrations and effusion within the joint; by reflexed pain, muscular spasm and consequent malposition; and, in fine, reactive disturbances of the constitution.

If the patient has been properly attended to at the first stage, the disease will but rarely advance to the second, and if the local affection was of a nature that could not be checked in its advance by due precaution, the second stage will be at least materially mitigated by the previous treatment.

Assuming, however, that the patient comes under your charge with the full pathological and clinical force of the second stage, the same remedies and appliances commend themselves, for rest and position are thei mperative axioms whilst the disease is in active progress. In this stage the antiphlogistic treatment is resorted to in vain, as long as rest and position of the joint are disregarded, and the limb permitted to bend, rotate, or assume any prejudicial posture. Nay more, the antiphlogistic remedies even fail to give the slightest relief or to alleviate one single symptom; my own personal observation has decided this fact conclusively, and I do not entertain the slightest doubt that other surgeons have met with the same negative results. But in securing rest and position to the affected articulation, we almost instantaneously give relief to our patient, and initiate progressive improvements. Having done this it rests with you whether you deem local depletion and the application of ice or narcotic fomentation additionally necessary. I have but rarely and I may say but exceptionally needed them, although I mean not to deny the fact that the distended capillaries may temporarily and usefully be depleted by leeches, wet cups and scarifications; the effect of which you have. however, to render permanent, by means of which I shall soon speak.

If the affected member has already been placed in malposition, you have promptly to reduce the same to insure articular rest. This should be done under the full influence of anæsthetics. I consider chloroform better than ether, and equally safe. If I stated the number of chloroform

applications that I have made with complete safety, it might be considered as grandiloquy, and as a slur upon professional brethren who have had the misfortune of meeting with fatal accidents. My mind is free from any such intention; I simply state the facts. Yet I cannot divest myself of the impression that many accident cases might have been obviated by the use of a proper and reliable article, by descrimination of patients, and due care by the administrator.

Of all the chloroform offered for sale in the market, I deem that of Dr. Squibb of Brooklyn the best; it is always of the same purity and specific gravity, of the same physical quality and physiological action, and I use it with perfect confidence.

The mode in which I administer chloroform is very simple, although, perhaps, not economical. I form a coarse towel into a short and wide funnel, with an inch opening at the apex for the free access of air; and look more upon the action of the lungs as indicative, than upon that of the heart. At the very moment that the thoracic respiration ceases, and the diaphragmatic suction prevails, I suspend chloroform inhalation, whether the patient be under its full influence or not. This seems to be the margin of its legitimate use, beyond which the danger commences.

Patients addicted to the copious use of alcoholic liquor, and those that present a leuco-phlegmatic, bloated and hydraemic appearance, are not fit recipients of chloroform; nor would I deem it safe to administer it to patients with a weak and flat pulse, in whom the propelling power of the heart is more or less impeded by the fatty degeneration of that organ.

It has been my fortune almost always to be assisted by reliable and experienced men who watched the effects of the chloroform, and did not divide their attention by looking after the operative proceeding. In a few instances I came near losing my patient by chloroform, and averted the fatal catastrophy only by noticing the impending danger in time. But these mishaps were clearly traceable to that carelessness which arises from the divided attention of the assistant.

The patient being under the full effect of chloroform, we now proceed to reduce the malposition, and bend the limb either in the opposite or intermediate position from that in which we found it. If we meet with resistance we have to overcome the same by a legitimate effort of physical power. I would not hesitate to break up inter-articular adhesions if they offered opposition. If intra-articular effusion opposes the reduction of the malposition, I would certainly perform paracentesis of the joint. If muscular contractions are in the way, I would resort to myotomy or tenotomy.

There are authors who oppose every and all interference with the

position of inflamed joints, as downright meddlesomeness, and as reprehensible surgical practice, and advise the reduction of the inflammation as the preliminary step. I apprehend that their advice is actuated much more by traditional fears, in interfering with inflamed articulations, than by experience.

Unless I were permitted to adopt that plan, I would decline all res-

ponsibility attached to the treatment of any joint disease.

I have already stated that antiphlogistic remedies have very little effect upon the inflamed structure of a joint, and none whatever if the articulation is permitted to be disturbed in its needful rest, by the jerks of the patient, or the spastic oscillation of irritated muscles,

If under such circumstances, and under the purely antiphlogistic treatment, the disease becomes arrested, it is in spite of, and not by virtue of such treatment, and probably has been protracted thereby. I could prove this by uncountable cases, and produce the individual patients to prove the facts by their own stories. But such evidence is scarcely needed to gentlemen whose own ore of experience will furnish them with sufficient affirmative facts.

No one will deny the beneficial results of relieving an inflamed articulation of its morbid product, provided that the process of removing the same does not entail additional danger. Mr. Barwell does me the honor of eulogising the operation which has benefitted so many of his patients.

That the operation, if properly performed, is harmless, I shall prove to you on a future occasion.

The division of muscles for therapeutic and orthopædic purposes in joint diseases has met with an unfair adjudication. Barwell, Davis, Prince and other writers on the subject are in toto against this operation; they hold that extension is quite sufficient to control the spastic affection of muscles agitated by the reflexed effects of joint diseases. My experience in extension in the affections of joints is certainly not inferior to any one of these gentlemen, and perhaps not inferior to them collectively. I say so with due respect to the literary merits of these authors. And I can bring forth, if required, the very proofs of Dr. Davis's error by cases which he had treated by extension for months in succession and in his very establishment, without subjugating the muscular resistance.

Need I state to you that I have availed myself with avidity of all suggestions and means promising aid and comfort to this class of my patients? And it would surely be a source of gratification to me if I could consistently and truthfully acknowledge my professional indebtedness for information, valuable or practically useful. As it is, I am impelled

to state, that I have derived little or no benefit from extension per se in the treatment of progressive joint diseases. Whatever benefit I have derived from it at all, is unquestionably due to its collateral effect upon fixing the affected articulation.

The collective experience on this question I can sum up in the following aphorisms.

1st. Extension cannot part the inflamed articular surfaces, for which it has been erroneously designed by its author.

2nd. Powerful extension is perhaps the promptest remedy against an ephemeral muscular spasm, as every one has experienced with himself if he has happened to be suddenly attacked by spasms of the muscles of the calf, but it cannot be relied on in persistent spastic agitations of the muscles.

3rd. In many instances, extension will not only fail to relieve the spasms, but will re-act unfavorably upon the violence of the existing joint disease, if persisted in.

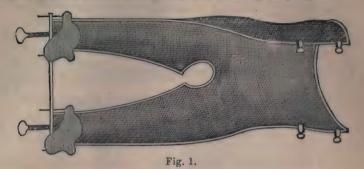
4th. The division of the contracted muscle is the surest and unfailing remedy.—

The most violent periods in the course of joint diseases I have observed, in consequence of keeping a retracted muscle on the stretch, and nothing short of division would give relief, though many things and the most stringent antiphlogosis were vainly tried before.

It is indeed a most egregious error to assume that the division of contracted muscles is merely of mechanical importance; in some, as yet physiologically unexplained manner do the contracted muscles relate to the existing joint disease. The retractions never appear before the disease has advanced to a certain degree of violence and structural invasion, and unless overcome in an effective manner, they increase to actual contracture. In all these cases the disease is necessarily protracted, and when at last it subsides, the contracture remains though its original cause has disappeared. On the other hand, the original joint disease may be reproduced after years of extinction, if the contracted muscles are unduly and persistently extended. Some cases of this description are but too lively in my remembrance, and my experience on this subject is too dearly bought to be ever forgotten.

From all this it follows that certain muscular groups stand in vital relation with certain joints, one actuating and irritating the other through the same source of nervous supply. Hence the division of so contracted muscles has a vital bearing on the status of the joint, aside from the mechanical relation. In this view we have to judge the therapeutical character of the operation. Dieffenbach already suggested the antispastic effect of

myotomy and tenotomy; I not only accept his view as correct, but from experience, I am justified in enhancing the same, that in joint diseases at least, it is the most reliable, prompt and unfailing antiphlogistic.



Having suggested and practised myotomy as an antiphlogistic, it is but natural that I should spread before you the grounds on which it stands. The way in which I came to the knowledge and appreciation of this remedy, was simply this; acting on the conviction that rest and position were the two great axioms in the treatment of joint diseases, I had to dispose of muscular resistance as best I could; and often not being able to get rid of it by any other means, I resorted to division. The effects of the division upon the arrest of the joint disease being strikingly beneficial, I gradually included the same as a remedial agent. A practice of fifteen years duration of this operation entitles me to a vote on its merits.

More than in the first stage, rest and position of the affected joint are requisite in the second; and it is in this where special apparatuses are profitably resorted to, to accomplish so important an object. In hip disease, my wire apparatus has not yet been exceeded by any later invention, I place it before you for inspection [fig. 1]. You will see that it consists of a heavy wire frame, which is so covered with wire webbing as to fit the posterior half of the body, from the axillary cavity to the sole of the foot. There is an opening for the anus; the foot boards move by a screw and bolts. To protect it against the corroding influence of urine and faeces, that part of the apparatus most exposed, should be thickly covered with varnish. The average price of the same for children is fifteen dollars currency. In using the apparatus, (fig 2) you have to line it with cotton or other wool or tow, and whilst the patient is under chloroform, you place him in it, and fasten by means of flannel bandages, body and limbs, so securely as to insure his position. If you should desire likewise to apply extension, for greater security of rest and position, you may apply longitudinal and circular strips of stout adhesive plaster, and fasten the former to the foot board.



Some writers, among them Mr. Barwell, have challenged the originality of this invention, and boldly pronounced it a copy of Bonnet's wire apparatus. I apprehend that Mr. Barwell has seen neither, otherwise he could not have come to so inapplicable a conclusion. I have never claimed the introduction of wire into surgery; that point is conceded. Bonnet's apparatus is a clumsy and unwieldly contrivance, produced for no other purpose than to raise the patient by means of pulleys, in such a manner as to obviate painful jarring; my apparatus is an improved Dzondi-Hagedorn where direct extension can be exercised, whilst the counter extension rests with the healthy extremity on the same principle which we employ in having our boot pulled off.

I leave it for you to decide, whether the mode of extension commonly employed in hip disease, offers the same advantages as my apparatus.

In this, position and rest are insured; the patient can pass his focces with perfect ease, by raising the lower end of the apparatus, and placing a bed pan under it. You can carry the patient from one place to the other, put him in a carriage, draw or drive him into the open air, and thus meet all the objections that have been raised to confinement.

In the other mode, the extension is a fixture of the bed, but what is

still worse, it allows the patient to accommodate himself to the position, so as to render extension nugatory. I have seen the patient turn right around, with the perineal band, and accommodate himself so ingeniously that the malposition became as bad as if there had been no restraint whatever.

Davis, Vedder and Barwell, have successively suggested portative extension apparatus to obviate the confinement of the patient. The honor of the original suggestion is entirely due to Davis, and the merits of the same ought to be liberally accorded to him, for it certainly has broken the ice of the scrofulous heresy, and paved the way to the rational ideas of therapeutics, which had been previously advanced, but disregarded up to that time. Sayre, though strictly speaking, but an exponent of Davis, nevertheless deserves some credit for the adroitness with which he has propagated and popularized the instrument, which seemed to have been an elephant in the hands of the inventor.



Davis's instrument as improved by Sayre is here shown (fig. 3.) But all the before named apparatus are at fault in one essential point: they neither fix the affected joint, nor do they prevent the adduction of the extremity. The amount of extension exercised by them is, moreover, very insignificant, and if it was fifty times as much, it could not separate the articular surfaces of the hip joint, as is erroneously claimed by their respective authors. Besides they depend on adhesive strips for their fastenings, which do not stick well in cold weather, and easily slip in warm. Sayre's modification to circumvent the affected extremity with a semicircular addition at the lower end of the instrument, so as to gain two purchases and two fastenings, was an acceptable improvement in the adjustment, but no more.\*



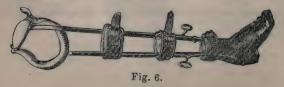
<sup>•</sup> The latest contrivance of this kind is that of Dr. Taylor, of New York. He needed not to have gone to the expense of a patent (!) because it offers no superior inducements and is not likely to be employed by any one else.

These deficiencies in the mechanical construction of portative apparatus, have obviously induced Andrews of Chicago to fasten a straight steel crutch to the boot, allowing shortening and elongation. In appropriating thus the foot for extension, the tuber ischii for counter extension, and the screw as the moving power, he happily supplied a desideratum and got rid of the annoyance and insufficiency of the adhesive strips.



Fig. 5.

I had seen nothing of Andrews' very acceptable improvement when I constructed the apparatus which is now before you (figs. 4 and 5). From this to that which I now use, was but one step (figs. 6 and 7), it needs no description or explanation, its construction speaks for itself. Not knowing the chronological priority of either Andrews' or my appliance, I will concede with pleasure this honour, if such it be, to my diligent co-labourer on this field of surgical culture.



My instrument affords both efficient extension in a vertical line, and complete fixture to the joint, wherein lies its chief usefulness. For two years I have had it in use, and it has given me the fullest satisfaction, in promptly responding to all the indications that can possibly be realized by such a contrivance, and above all it has guarded against the re-shortening of the adductor muscles once divided, which so often happened in my practice, when I used Davis's, Sayers's, and Vedders's apparatus.



Fig. 7.

That of Barwell, I know but from its illustration; I have never seen nor used it, and forego an opinion on its merits.

With all advantages that may possibly accrue from my instrument, I must warn against its premature use at the second stage, unless the disease has substantially subsided, and you intend only to follow up the results of your treatment by its application; the superincumbent weight is too much for an inflamed hip joint, even when supported.

To secure the rest and position of the knee joint, I generally prefer metallic splints to stiff bandages. You can handle them better without jarring the joint; you can leave a part, or the entire joint free, for observation and local appliances, and lose nothing in the mechanical effect; you can take them off and re-apply them with the greatest ease: you can combine extension with them, give it inclined plane, &c., and thus secure all the advantages for your patient that could be desired. I generally keep a set of these splints on hand, so as to be prepared for emergencies. The price is but trifling.



Fig. 8.

One is a simple gutter splint (fig. 8) for simple cases. The other has a semicircular deficiency at the knee joint to expose one or the other side (fig 9). The third consists of two splints joined by intermediate iron braces designed to leave the knee joint entirely free. (fig. 10)

By drawing bandages from one side to the other across the knee, a moderate degree of anterior pressure may be exercised. If the patient has so far recovered as to resume locomotion with safety, a portative apparatus of an approximate efficacy, should be substituted for the metallic splint. For this purpose, stiff bandages, leather or gutta percha splints, or a special contrivance (figs. 11 & 12) would equally answer. The last consists of two braces along the limb, three or four bands, with a knee cap made of buckskin. If the patient's limb is much attenuated and cylindriform, it would be an improvement to connect the apparatus with the boot, so as to prevent slipping.



Fig. 9. (See page 159.)

Sayre has introduced, for the purpose just mentioned, a portative extension apparatus for both knee and ankle joint, with a view of parting the affected articular surfaces, and thus alleviate pressure upon one another. My belief is that such an object is unattainable by any mechanical contrivance, and moreover superfluous.



Fig. 10. (See page 159.)

In placing an affected joint in such a position as to have the largest possible contact of the articular surfaces, we at any rate diffuse the pressure, if it actually does exist. Sayre's knee apparatus can only be used when the limb is fully extended.

In order to perform paraceutesis of an articular cavity, the rule ought to be observed, to place the joint in such a position as to drive the liquid to the most accessible spot. At the hip joint this is at the posterior circumference of the acetabulum. The glutei muscles being attenuated, we generally succeed in discovering fluctuation at that particular place.

Whilst the surgeon is about inserting the trochar, an assistant takes hold of the affected extremity, and rotates it inwards, which gives the greatest distension to the posterior wall of the capsule. This

manœuvre not only facilitates the entrance of the instrument, but likewise the exit of fluid, and prevents the entrance of air.

At the knee joint we have to procure first a straight position, which drives the entire liquid into the anterior portion of the joint. By means of a tightly applied flannel bandage, commencing at the toes, we obviate cedema; the joint is then surrounded with stout adhesive straps, from the tuberosity of the tibia, to beyond the patella; the unevenness of the joint being previously filled with graduated compresses or with cotton. Thus the liquid is driven to the cul de sac, where it is easy of access.—

That place in the cul de sac between the duplicature of the vagina femoris and the tendon of the biceps, is most available, there being no muscular structure interposed. Having thus well prepared the articulation, you will easily enter with the instrument, and the liquid will rush out through the canula with great velocity: by moving the finger across the distended portion, you still more facilitate its exit, and with the same finger close the wound, while the other hand withdraws the canula.

I have thus in numerous instances entered the articular cavity, and repeatedly the same articulation, without having caused in a single instance reactive trouble, scarcely ever failed to give instantaneous relief to the joints, although in many cases but temporarily.

This is the same proceedure which I invariably adopt in the treatment of hydrarthrosis, and which has proved in my practice a very reliable method.

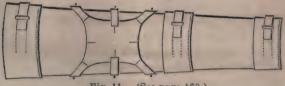


Fig. 11. (See page 160.)

Puncture of the joint, in these cases, has been unjustly abandoned by the best surgical authorities, (among others, Nelaton) who considers it dangerous, inasmuch as there is not sufficient centrifugal pressure of the liquid, to prevent the entrance of air, for he states most emphatically that the inter-articular fluid runs out slowly and never entirely. By the plan just advanced we overcome all difficulties and dangers, thus one of the objections may be considered disposed of. The other concerns its efficiency; in this respect, I can but state, that with the exception of one single case, I have radically relieved twenty-seven cases; one by three, two by two, and the balance by one puncture. Of course I have continued compression of the articulation for some weeks after the operation.

All the cases operated on were protracted ones of not less than three months, and the majority of more than a year's standing.



Fig. 12. (See page 160.)

This plan, then, compares very favourably in point of dispatch and efficacy, with any other I know of, and certainly is not as hazardous as the injections suggested and practised by Bonnet and Nèlaton.

Compression of affected joints is one of the most estimable auxillaries in their treatment, and should be resorted to wherever it is practicable; but when resorted to, it should be thorough and decided. Whether the substance employed for compression has any additional virtue, and whether, therefore, porous or impermeable substances should be used, I am not as yet decided; my experience is almost entirely confined to the use of adhesive plaster spread on Canton flannel, on account of its pliability and durability; and I have been satisfied with the usefulness of these substances.

When, in spite of this treatment, the disease should advance, the articular cavities become more and more distended, and the tendency to disruption is manifest, then the question of free incision arises.

Gentlemen, I am most anxious to put my views on this question so definitely on record, as to leave no doubt as to their bearing and meaning: therefore, I wish to be understood. First. That I do not advise nor practice any meddlesomeness with joints at all, unless the strongest indications prevail. Second. A moderate quantity of liquid within the articular cavity, whether this liquid be essentially synovia, or plastic or purulent effusion, is no indication per se, to puncture a joint, for the two former liquids may readily be absorbed and got rid of, and so may pus by previously undergoing a fatty degeneration. I have met with such cases, and but lately the joint of one of my patients opened in the middle of the thigh, from which I could squeeze a large quantity of pus, fragments of cartilage and other detritus, which had for months painlessly occupied the joint, and had completely undergone fatty degeneration. Thirdly. I puncture the articular cavity if the effusion is progressive, the distension of the joint very painful; and for the purpose of reducing an existing malposition, provided the latter depends in part or in toto on the presence of intra-articular effusion. Fourthly. I open affected joints by free incisions, when progressive sup-

puration of the internal articular surface exists, and threatens disruption of the capsular apparatus.

If I am not mistaken, my esteemed friend, John Gay, Esq., of the Great Northern Free Hospital of London, has first claimed the legitimacy of this operation, and received a goodly share of abuse for it. I have to offer but a few remarks on the usefulness of free incisions. The very essence of surgical wisdom is to imitate nature, and to avail ourselves of similar means for certain purposes. In suppuration the joint is first distended to its utmost capacity by pus, and then spontaneously opened, and the matter forced into the adjacent tissues. The ordinary place of perforations is near the bone, sometimes in part below the periosteum, mostly under the respective fascize of the extremities, into the interstices of the muscles, and along the bone; additional destruction is thus caused.

If a joint disease has acquired this character, the joint, as such, ceases to exist: all the structures constituting the internal surface undergo pathological changes, which mostly admit of no reconstruction; the articular cavity is simply an abscess, and should be treated as such. The old surgical axiom "ubi pus ibi evacua," has received its qualification by modern surgery, but its full sway must be recognized, whenever the abscess manifests its tendency to spontaneous opening. For if we have to choose between the alternative of spontaneous perforation, and its undesirable sequelæ, and free incisions,—no surgeon can hesitate in his preference. Sometimes it might be advisable to puncture the joint, and even repeatedly, with a view of obviating the danger of spontaneous disruption; but if the latter presents itself in unmistakeable signs, we should not hesitate in changing the articular cavity into an open abscess, and give free vent to its contents. Hancock, of London, claims exsection of the joint as preferable to free incisions, being more efficacious and less dangerous. There is some conditional truth in this proposition, well deserving consideration. If you freely open a joint and find pathological changes, beyond those of simple suppuration, as for instance, extensive caries; the sequestration of a bone; the partial or total destruction of intra-articular ligaments and cartilages; in fact changes that would require many months to overcome, exsection of the joint would be infinitely preferable, in such case the free incision would be the initiatory step towards it. On the other hand, if the joint is in a condition of simple suppuration, so that the closing up of the articular cavity by granulation might be safely relied on, the free incision will suffice. In fact, both are distinctly different remedies for distinctly different purposes, and one cannot be substituted for the other.

Having laid down the general principles for the second stage of joint

diseases, we may now refer to a few special points. One of them is the treatment of subperiosteal extravasation or effusion; another, the special treatment of those necrobiotic disintegrations of one or the other condyle, to which I have adverted in another part of our discourse. The management of the former is very plain: a subcutaneous division may give all the needful relief, and stop the impending trouble, at any rate prevent its increase. The other is of a more subtle character, requiring a clearly established diagnosis, settled therapeutical principles. and consistent action. How to arrive at the first I have already indicated, and to render the diagnosis still more conclusive the use of an explorative trochar would be advisable. If we have become thus satisfied of the nature of the complaint, trephining by a small instrument, and the subsequent scooping out of the disintegrated tissue, is the most direct and legitimate remedy. I must, however, confess that I have, but in a few cases, resorted to this operative proceedure, though with marked success; my personal experience is therefore limited, but it would seem the most appropriate and direct remedy when a clear diagnosis can be obtained.

In summing up the treatment of the second stage of joint diseases, you will perceive that I rely exclusively on local appliances with a view of obtaining first, rest and position of the affected articulation. In procuring these I have occasionally to divide resisting muscles and to puncture joints.

Second.—Compression of the inflamed structures.

1 hird.—Paracentesis and free incisions in joints when suppuration prevails.

Fourth.—In dividing periosteum, and in removing disintegrated bony structure by trephine and scoop.\*

In the second stage of this class of diseases, we have often to deal with violent constitutional disturbances, which are more readily overcome by proper local treatment than by any other devised medication, nevertheless the utmost attention should be given to proper diet and hygiene, which is the more necessary as all these cases are more or less protracted, and therefore more or less bear upon the constitutional vigor.

Now, gentlemen, let us contrast the treatment just described with the measures of the old school. Ours is mild when compared with the barbarous derivatory appliances. Moreover, ours is effective; the other

<sup>\*</sup> Kirkpatrick, Medical Press and Circular, Dublin, Aug. 21st, 1867, recommends the use of escharotics, especially potassa c. calce, for the same therapeutic object, and relates most beneficial results.

is worthless. By our treatment the joint is placed in a condition of spontaneous recovery. The other proposes to subjugate, by direct means, a disease over which it never had nor could exercise any positive influence. Nor is this all; by applying the actual or potential cautery, new troubles are superadded and new taxation is imposed upon an already overtaxed constitution.

But derivation is not only barbarous, useless, and obnoxious, it is even inconsistent with the very pretensions for which it is used. Supposing tubercular depositions are at the bottom of a joint disease, these depositions are either latent and innocuous, or they act like any other foreign substance in creating circumferential inflammation with a view of eventual elimination. In the former proposition, we know nothing whatever of the presence of those depositions; simply because they give no trouble. If we could possibly anticipate the time when such tubercular depositions would be likely to take place, then derivation might be relied upon as a preventive of the impending danger.

But since we have quietly to wait until the so called tubercular depositions are formed, and until they are undergoing the process of softening and compromising the surrounding structures, there is not even a pretence of reason to employ derivation, just as little as if any other foreign substance was lodged within the precinct of the organism. It is claimed that tubercle is not only without organization, but even, not susceptible of it: derivation can therefore exercise no action upon the tubercle itself; that much must be logically admitted. Can it prevent the disintegration of the adjacent structures, and re-establish their former type? of course not; then what is to be expected from derivation at all?

The progress of pathology has been most fruitful in recognising the existing physiological laws which govern alike health and disease. The most reliable observers tell us that inflammations once set up, will run their course to their termination, whether medication be imposed or not. The idea of bringing a recent pneumonia, bronchitis, pleuritis or a catarrh of the air passages to an abortive end has been so thoroughly exploded that no wise practitioner follows any other than the expectant method of treatment, and Hughes Bennett has earned for himself a lasting distinction in proving that fact by clinical statistics. If you concede the fact you have to accept the inferences, that is to say, if you cannot cut off or shorten the course of a recent disease by any means; what can you hope to do in cases of long standing, in structural disintegrations, and more particularly then, when the cause (tuberculosis) is persistently at work.

It will be equally easy to demonstrate the utter uselessness of deriva-

tion in the primary affections of the synovial lining. In the mildest form of them (hydrarthrosis) there is a degeneration of the synovial membrane which Johannes Muller describes as lipoma arborescens, which is fully compatible with the increase of the natural secretion, but in which, however, the absorbent powers seem to be entirely lost. Next you have the so called catarrh of the synovial lining in which, according to Volkman, the epithelium is partly thrown off, partly converted into pyogenic source: there you have morbid secretion and loss of absorption. And if you have to deal with a more parenchymatous suppuration of the membrane, you have no longer synovial membrane, but a luxuriantly granulating and secreting surface, with very doubtful absorbing endowments.

The restitutio ad integrum is absolutely conditional to the re-establishment of absorption, and this is a question of time. Can you reach or overcome such a difficulty, by blistering or any other derivant applied to the external surface of a joint? Certainly not; like in pleuritic or pericarditic effusions you have either to tap or patiently wait.

I do not want to enter more deeply into the discussion of the therapeutic value of derivation, heretofore unduly praised and over estimated. All I propose is to make a few hints and suggestions, and leave the rest to your mature deliberations.

To be continued.

A Case of Fracture of the Cranium,—removal of depressed portions of bone—recovery—under the care of John Reddy, M. D., L. R. C. S. I., &c. Physician to the Montreal General Hospital.

The following interesting case reported by Dr. John Bell, A.M., apothecary to the Hospital, I wish to lay before your readers. I have added the appearance of the wound when seen by me, and the operation. I have further to note, that at the time of the accident a small portion of the brain came away, Dr. Fraser informs me, about the size of a marble. The stage of collapse lasted a few hours after admission, but urgent signs of compression immediately following, decided me as to the course to be pursued; 29th September, Donovan walked about three miles to pay me a visit, when he appeared in good health and spirits, the wound being firmly cicatrized. 7th October—called again, quite well.

Thomas Donovan, mason, aged 32, while working on the new St. Paul's Church, fractured his skull, on the 19th July last, in the following manner. The beams for the floor of the body of the building had been laid, and while attempting to cross one of these, missed his

footing and fell to the floor of the basement below. He passed through a distance of thirteen or more feet, and alighted on his head, which struck the corner of a mortar-pan, inflicting a broad V shaped or horse-shoe wound in the scalp, the apex of which was near the crown of the head, the cornua of the wound extending nearly parallel to the upper and posterior edges of the parietal bone. The left shoulder was also very much contused. He was first seen by Dr. Fraser, who immediately ordered him to be taken to the Montreal General Hospital, where the wound was dressed by the House Surgeon to await any proceedure the attending Medical officer, Dr. Reddy, might deem necesary.

"The dimensions of the wound already described were about an inch and a half long, the scalp being detached somewhat more than an inch all round, a considerable depression existing about the centre and the edge of the surrounding bone, could be felt in its entire thickness. After a careful examination, assisted by my colleague, Dr. Fraser, I proceeded to apply the trephine, but finding the part I had selected, although apparently fixed and solid, was moveable, by means of a lever and forceps, I removed three pieces of the cranium. I found the dura mater separated for about two inches, and lacerated to the extent of one inch, and a large clot underneath; clots, also, lay between it and the detached portion. On their removal a free hemorrhage resulted, which could only be restrained by lint placed in the bleeding aperture as well as the application of ice."

The fragments removed, each including the whole thickness of the parietal bone, and being of a triangular form, were of the following dimensions:

	Length.		Breadth.
1st.	1½ inches		14 inches.
2nd.	11/2 "		1
3rd.	1 "		3 16

For nine days after the operation, his head was covered with a large bladder filled with pounded ice, and after this was discontinued the wound was dressed with lint wet in iced water, constantly changed.

He was almost continuously delirious for five days after his injury; at times he could recognize his friends, then he would doze off and wake again delirious. After that time, however, he rapidly regained perfect consciousness.

For three or four days after the accident there was paralysis of motion of the right side. Sensation of pain was never entirely in abeyance in the right leg, although it was in the right arm. On the third day sensation returned in the arm, and at the end of a fortnight was so far restored that he only felt as if his fingers were covered with a very thick skin.

Both sensation and motion rapidly returned in the leg, which he was able to extend and flex on the fourth day after the operation. On the 11th of August he regained the power of moving his fingers, and on the 13th he was able to bend his arm a little at the elbow.

Aug. 15th. Patient is able to lift his arm from his side, and can extend and flex the forearm with considerable quickness and power.

19th. To-day he walked across the ward and back to his bed.

21st. Walked about again to-day as he had done for some days past, but on lying down did not feel so well as usual—suffering some pain in his head and increased heat in the neighbourhood of the wound, which has been heating steadily and secreting a large amount of healthy pus.

31st. Wound nearly all cicatrized and closing rapidly. Can use his arm with considerable freedom, in every direction. Walks about and sits up for a good part of each day. From this time till he was discharged from the Hospital, which was on the 19th September, he gradually regained strength and the more perfect use of his limbs. From walking about the wards of the flat on which he lived, he ventured down-stairs and could use a staff with the affected hand. Every day for about a week before leaving the Hospital he walked down three flights of stairs, about the Hospital grounds and up to his ward at night. When he left the Hospital, sensation and motion were perfect both in his leg and arm, and the wound on his head had closed with the exception of a small point which was covered over with a piece of dry indurated pus. From the time of admission he was ordered a liberal diet consisting of bread, tea, soup, two pints of beef juice, one pint chicken broth, corn-starch, two ounces of butter, one egg, and six ounces of brandy, per diem. The brandy was reduced in quantity as the necessity for its administration decreased.

Montreal General Hospital, Sept. 26th, 1867.

#### THE CANADIAN MEDICAL ASSOCIATION.

Convention at Quebec, October 9 and 10th, 1867.

Some months ago the Quebec Medical Society passed a series of four resolutions—the first referring to the necessity of having a uniform system of granting licences—the second asserting that degrees from Universities should only have an honorary value and that licenses to practice should emenate from a central board—the third that a Committee should be appointed to confer with the various Universities and Schools on the subject, and the fourth called a convention of the profession to meet at Quebec on the second Wednesday in October to consider the

above questions, and to form a Canadian Medical Association. These resolutions were printed in circular form and distributed largely throughout the Dominion. Considerable interest was excited, and we were not at all astonished to find the St. Louis Hotel, Quebec, on the morning of the 9th, filled with Medical men from all the Provinces, awaiting the opening of the Convention. The grand hall of the Laval University had been kindly put at the service of the Convention, and at ten o'clock upwards of one hundred and fifty Delegates were in attendance.

Dr. Sewell, the President of the Quebec Medical Society, having taken the chair, and the members having been called to order he said! "Gentlemen, the Duke of Buccleugh on opening a scientific meeting held last month in Dundee, said it would be a bad compliment to himself as well as to the Society, who had elected him to the honorable position of chairman, to declare himself unequal to the task. He (Dr. Sewell) had not, he regretted to say, this inward conviction, on the contrary, he knew many of his colleagues who would have filled the chair better than he could hope to do. Having been called upon, however, as the President of the Quebec Medical Society to preside at the opening of this interesting and important meeting, he would do so to the best of his ability, trusting all would accord him a generous support. He should be proud at any time to act as the representative of his colleagues, but he was particularly so on the present occasion, surrounded as he was by so many eminent practitioners from all parts of this new and great Dominion of Canada, met together for the first time in Convention, to discuss topics connected with the advancement of the Medical profession. Whatever tends to raise and dignify our profession tends also to the comfort and well being of society. Whatever tends to make individual members of that profession, better men and better physicians, contributes most materially to the advantage of the public at large. There is nothing selfish then in this, or similar Conventions which take place annually throughout the world. We are not seeking our own agrandisement nor our own individual advantage, we desire to promote the general welfare of our fellow-men and shall rest content to benefit with the mass. We, in this part of the Dominion, have long known and felt the advantages of an Association, similar to the one suggested, in a limited degree; but the profession having been incorporated, for many years we have managed our own affairs and enjoyed advantages which he believed many of our brethern in other parts of Canada do not possess. We were to all intents and purposes a Medical Convention on a small scale, and having tasted the good fruit arising from this source is one great reason why we wish so earnestly to see those advantages extended through the whole Dominion. He looked upon this

day as a most important one in the history of Canada—one replete with interest and full of bright promise for the future, not only to ourselves, but to the public at large. Moreover he was satisfied that this meeting had a national as well as a scientific importance, which must commend it to all reasonable and right thinking men. He might shew what Associations similar to the one proposed, had done on the other side of the Atlantic. He might point to the high Status which Medicine holds in Great Britain and Ireland. He might show how largely they have contributed to the scientific reputation of British and Continental Medicine; how they have drawn together large bodies of professional men and cemented that social bond of unity and good feeling which should always exist among men engaged in the same glorious work of relieving the sick and suffering, of saying a word of comfort to the depressed, or of extending the hand of sympathy to the destitute and friendless. He might also point to the improved system of education, both general and professional, which is now insisted upon throughout the world, to the sifting ordeal through which young men have to pass before they are entrusted with the lives of their fellow creatures; to the many points connected with the lives of their fellow creatures; to the many points connected with hygiene, so intimately interwoven with the welfare of mankind, which have been discussed and fully ventilated in these meetings. All this, and much more, have these associations effected both at home and abroad. May we not then look for similar good results from the Canadian Medical Association, now being so happily inaugurated. Does not this large meeting of medical men, many of whom have left extensive practices, and have travelled four, five or six hundred miles to be present here and to add their quota to the storehouse of Canadian medical science -does not this fact alone, augur well for our future destiny? Why should our reunions not succeed and result in the same manner as similar meetings have done in other countries? He could see no reason why they should not; but there must be no lukewarmness—no hanging back—no petty jealousies to mar the general harmony—we must all put our shoulder to the wheel—we must all work heartily, and success would finally crown our efforts. He would now do what perhaps he should have done at first, namely, offer his thanks and those of the other members of the Quebec Medical Society to the delegates and other members of our profession now present,—very many of whom are here in answer to our invitation,—not only at a great sacrifice of personal comfort, but also at a great pecuniary loss, to assist in deli-berating upon those important subjects in which we are all so much interested and which are to be submitted to the consideration of the meeting. As I said before, the presence of so large a number of delegates

is a guarantee of our ultimate success, and these gentlemen deserve, as they have, our most cordial thanks. Dr. Sewell concluded his remarks amid loud applause.

Dr. Landry, Vice President of the Quebec Medical Society, in French,

welcomed the members of the convention to Quebec.

Dr. Steverman of Lunenburg, N. S., proposed, seconded by Dr. Jackson of Quebec, that the following gentlemen, viz: Drs. Berryman, Jackson, Steverman and Harding be appointed a committee to examine and verify the credentials of the delegates and to continue to receive the credentials from such delegates as may hereafter arrive.

Dr. Worthington, of Sherbrooke, did not see the necessity of the resolution, as the invitation was extended to all licensed practitioners, and all here were, in fact, delegates. He thought the committee should be one, in fact, to see that all were medical men duly licensed—not homo-

opaths, &c.

Dr. Hingston, of Montreal, was of a similar opinion.

Dr. Marsden of Quebec, gave some explanations, showing that the office of the committee would be that mentioned by Drs. Worthington and Hingston—simply to ascertain that none but legally qualified medical practitioners were in attendance.

Dr. Fenwick, of Montreal, thought if this was the intention of the resolution it was not explicit enough. Half the members present had no

papers to present.

Dr. Hingston, of Montreal, proposed the following amendment, seconded by Dr. G. E. Fenwick, of Montreal: That all the members present being presumed to be duly licensed practitioners in the Dominion of Canada, be members of this meeting, and that the following be a Committee to register their names and places of residence—viz., Drs. Berryman, Peltier, Parker, Steverman, and Harding.

The amendment being put, was carried unanimously.

The committee then retired. The following comprises the names of those delegates who registered their names:

Drs. U. Arcand, Becancour; W. T. Aikins, Toronto; M. H. Aikins, Peel, Ontario; F. J. Austin, Sherbrooke; J. G. Blanchet, Levis, H. Blanchet, Quebec; J. B. Blanchet, Quebec; P. Baillargeon, Quebec; A. G. Belleau, M.D.C.M., Quebec, G. A. Bourgeois, St. Gregoire de Nicolet; Edouard Belleau, St. Michel; D. E. Burdett, Belleville, Alp. Brodeur, Roxton Falls; A. T. Brosseau, Montreal; Vercheres de Boucherville, Beauharnois; George Badeau, Three Rivers; Hon. P. O. Beaubien, Montmagny; C. V. Berryman, Toronto; Charles Battersby, Waterloo; J. G. Bibaud, Montreal; P. Bender, Quebec; L. Catellier, Quebec; Gustave

Chevalier, Bedford; county of Missisquoi; Charles Gaspard Couillard, Ste. Marie (Beauce); Francis W. Campbell, M.D. L.R.C.P.L., Montreal; William Canniff, Belleville; Alexis Charbonneau, St. Paul l'Ermite; Chs. E. Casgrain, Windsor (Ontario); Joseph Coté, St. Valier; L. Dion. Quebec; F. Dusault, do.; N. De Rainville, St. Barthelomie; P. Desjardins, Quebec; A. L. De Martigny, New Liverpool; C. L. De Martigny, Beauharnois; G. H. Dufresne, St. Stanislas de Batiscan; Samuel David. St. Ours; G. P. Degrassi, Toronto; J. A. Duchesneau, Terrebonne, county of Terrebonne; John R. Dickson, Kingston; Adolphe Dagenais, Montreal; Alphonse Deschamps, do.; Chs. Dubuc, do.; Chs. Timothé Dubé, Trois-Pistoles; Geo. Dunn, River du Loup en haut; F. X. Duplessis, St. Ferdinand d'Halifax; James R. De Wolf, Halifax; S. L. Earle, St. John N. B., J. E. Fortier, Quebec; Geo. E. Fenwick, Montreal; A. G. Fenwick. Three Rivers; W. Fuller, Montreal; L. A. Fortier, St. Clet, county of Soulange; W. W. Forest, Ste. Claire; L. D. Gilbert, Haltey, E. T.; Romuald Gariepy, Montreal; Gendron St. François, Rivière du Sud; Amedée Gaboury, St. Martin, Isle Jesus; J. B. Gibson, Dunham, county of Missisquoi; J. B. Garneau, Ste. Anne de la Perade, (Champlain); W. Gardner, Beauharnois; J. B. Garvie, City Medical Officer, Halifax, N. S., Séraphin Gauthier, Montreal; George Grenier, do., R. Hamilton, Sutton, C. E.; -Hillary, Aurora, Ontario; O. A. Hébert, Quebec; R. P. Howard, M.D., L.R.C.S.E., Montreal; W. H. Hingston, M.D., L.R.C.S.E. do; J. John Harding, New Brunswick; G. A. Hamilton, St. John, N. B. P. A. Imbleau, Ste. Famille; Alf. Jackson, Quebec; E. L. Lemieux, do.; Lavoie, L'Islet; E. Lindsay, Cap Rouge; A. Lachaine, St. Joseph de Lévis; L. H. A. La Rue, Quebec; J. E. Landry, do.; L. A. Lepailleur; Ste, Martine, county of Chateauguay; Camille Lafontaine, Berthier (en haut); J. A. Lapierre, Montreal, Napoleon Lavoie, Islet; Alex. Lesage, St. Grégoire le Grand; Eustache Lemire, Montreal; Alphonse Lenoir, Tannerie Rolland, Montreal; B.H. Leblanc, Pointe St. Charles, do., D.L. LaRose, Pointe aux Trembles; P. Larue, St. Augustin, Port-neuf; P. O. Lasisseraic, Ste. Julie (Somerset); C. O. Lebel, St. Gervais; W. Marsden, M.D. Quebec; H. W. McGowan, Bolton, District of Bedford; C. Morin, St. Nicholas; V. Martin, Chicoutimi; M. M. Metivier, Iberville; A. J. McMaster, Toronto; P. Munro, Montreal; H. Muir, Halifax, N. S.; J. D. Millet, Lanorais, county of Berthier; P. E. Mount, Montreal; J. W. Mount, Acton Vale; E. Munro, jr., Montreal; J. Marmette, Montmagny; A. T. Michaud, Kamouraska, A. Mignault, St. François (Montmagny; Jos. Painchaud, Quebec; R. Palmer, Riverside, (Hopewell); E. Provost, Sorel; C. S. Parke, Quebec; C. F. Painchaud, Varennes; D. McN Parker, Halifax, N. S.; H. Peltier, Montreal; P. Provost, Memramcook, N. B.; J. C. Poitvin, St. Martin; John W. Pickup, Beauport; L. S. Poulin, St. Hubert; F. S. Palardy, Vercheres; A. H. Paquet, St. Cuthbert; U. M. Poisson, Arthabaska; F. X. Perreault, Pointe aux Trembles; R. H. Russell, Quebec; Louis Roy, do.; G. Rousseau, do.; F. Rainfret, do.; Ol. Robitaille, do.; F. E. Roy, Quebee; J. R. Richardson, do.; Jean Philippe Rottott, Montreal; Edmond Robillard, do.; Sajuste Roy, St. Jean Port Joli; A. M. Rosebrugh, Toronto; James H. Richardson, University of Toronto; Charles Robinson, County of Peal, Ontario; Guillaume Ernest Roy, Boucherville; L. Telesphore Rousseau, St. Casimir; Jos. Ovice Rousseau, Nicolet; H. C. Rutherford, Dundas (Ontario); Thos. G. Rov. St. Joseph Levis; J. A. Sewell, Quebec; O. S. Strange, Kingston; W. E. Scott, Montreal; D. F. A. Sirois, St. Paschal; John H. Sangster, Toronto; P. W. Smith, Digby, N. S.; Jos. Steverman, Lunenberg, N. S.; James Stanfield, Indian Lorette; S. J. A. Simard, Quebec; Adol. Taschereau, M. D., Levis; J. M. Turcotte, Montreal; H. Therian, Rivière David (Yamaska); Hon. Dr. Tupper; C.B., Halifax, N.S.; L. Tétu, Rivière Ouelle; F. Z. Tassé, St. Laurent (Montreal); J. Taschereau, E. Taschereau; P. O. Tessier, Quebec; James Thorbun, Toronto; Chs. Verge, Quebec; L. L. Voligny, St. Elizabeth; F. Valade, Ottawa; A. Vanderheyden, Levis; J. L. Wherry, Quebec; W. Wakeham, Leeds (Megantic); H. W. Wright, Toronto; and E. D. Worthington, Sherbrooke.

Dr. Harding, of New Brunswick, did not know till a few moments ago that he had to propose the following resolution, but he felt a good deal its importance. He then referred to a movement which took place a short time ago in the Province of New Brunswick. The legislature passed an act enregistering the profession under the name of the Medical Faculty of New Brunswick. The profession in that province viewed with satisfaction the proposed Canadian Medical Association.

Moved by Dr. Harding, seconded by Dr. Marsden, that it is expedient for the medical profession of the Dominion of Canada, to form a Medical Association, to be called the Canadian Medical Association.

Dr. Marsden, of Quebec, viewed the resolution which he sconded as a most important one. He had long felt and advocated the formation of such an Association, and was much gratified at the success which promised to attend his exertions. On the passing of this resolution the functions of the Quebec Medical Society as connected with this Convention would cease, a new state of things being inaugurated.

Dr. Sewell then put the resolution which was carried unanimously, when he declared the Canadian Medical Association to be formed.

Dr. J. B. Garvie, of Halifax, moved, seconded by Dr. H. Blanchet, of Quebec: That the officers of the Canadian Medical Association shall be

elected annually, and shall be a President, four Vice-Presidents, one for each Province, one Recording Secretary, four Corresponding Secretaries, one for each province, and a Treasurer.—Carried.

Moved by Dr. Tassé, Inspector of Prisons, seconded by Dr. LaRue of Quebec, that a nominating committee be appointed, composed of Drs. Marsden, Tessier, Robillard, Howard, Roseburgh, Harding, Hamilton, Steverman, DeWolf, Sangster, Wright and Dickson.

Moved in amendment by Dr. Richardson, of Toronto, seconded by Dr. Hillary of Aurora.

That the elections of four Vice-Presidents and Secretaries be left to the delegates of each Province.

Moved in amendment to the amendment by Dr. Worthington of Sherbrooke, seconded by Dr. Gilbert of Hatley:

That the Nominating Committee for the Election of Officers be composed of two representatives from each of the incorporated schools of the Dominion of Canada, and two from each of the several Provinces not connected with the medical schools.

A good deal of discussion ensued upon the main motion and upon the amendments, but upon the amendment being put it was lost.

The amendment to the amendment was then withdrawn, when, the main motion was put and carried. It being one o'clock, the Convention adjourned till two o'clock.

At 2 o'clock the members of the Convention assembled, but as the Nominating Committee had not concluded their labours, it was nearly 3 o'clock before the meeting was called to order by Dr. Sewell, who then announced that the members of the convention and their ladies were invited by the proprietors of the Beauport Lunatic Asylum to visit that institution to-morrow at two o'clock. The Convention would meet at the Laval University at half-past one, when the Quebec Medical Society would provide means of transit to the Asylum.

Dr. Marsden, on behalf of the nominating committee, recommended the following as the list of officers for the Canadian Medical Association.—President, the Hon. Dr. Tupper, C.B., of Halifax. Vice-President for Quebec, Dr. Peltier; Secretary, Dr. D. C. MacCallum. Vice-President for Ontario, Dr. E. M. Hodder, Toronto; Secretary, Dr. Wm. Canniff, Belleville. Vice-President for Nova Scotia, Dr. R. S. Black; Secretary Dr. DeWolf. Vice-President for New Brunswick, Dr. Le Baron Botsford; Secretary Dr. W. T. Harding.

General Secretary, Dr. A. G. Belleau, of Quebec, Dr. R. H. Russell, of Quebec, Treasurer.

The Association then proceeded to elect its officers. The Hon. Dr.

Tupper, C. B., was elected President by acclamation. He was then conducted to the chair, (amid loud applause,) which was vacated by Dr. Sewell.

Dr. Tupper in acknowledging his election said:-He was sure they would believe him when he said that, taken entirely by surprise, he could find no words adequately to express the deep emotions excited by the great and undeserved honor which they had just conferred. Her Majesty the Queen was graciously pleased to mark her appreciation of his services in promoting the political union of the British North American Provinces. and he had had the high gratification of being seven times elected to represent his native county in the Parliament of his country, but he could assure them that no distinction that he had ever received had been a source of greater gratification or pride than his appointment by the vast body of distinguished and able representatives of the medical profession which now fill this Hall. When he saw before him so many gentlemen who had by their great learning and professional attainments, achieved a European as well as British American reputation, he felt deeply his unworthiness to fill the high position to which their kindness had elevated him: but inadequate as he might be to discharge the important duties of President of the Medical Association for the Dominion of Canada, he would yield to no man in ardent desire to promote to the best of his ability the interests of the profession to which he had the honor to belong. The last time he was in this Hall, it devolved upon him to respond on behalf of the Union Delegates from the Maritime Provinces, to an address presented to them by the distinguished faculty of the far famed University of Laval. The organization of this association was but a fitting sequel to the Union of the British American Provinces which has now been consummated, and which would, he hoped and believed, give increased elevation to all those institutions, whether political, professional or social. upon which the status and character of a country must depend. It was not his province to speak but to listen, but he could not refrain from saying that he trusted their deliberations would show to the world that their leading objects were to protect the health and lives of the people of this Dominion from the unskilled treatment of incompetent men, and to provide in the most effectual manner for the due qualification of the members of a profession so important as their own. Again thanking the gentlemen for the great honor they had done him, he must beg that kind co-operation and support at their hands, without which he should be quite unequal to the position in which they had been pleased to place

Dr. Peltier was then unanimously elected Vice-President for the Province of Quebec. On the motion to make Dr. D. C. McCallum Corresponding Secretary it was proposed in amendment by Dr. Fortier, seconded by Dr. Desjardins, that Dr. Rottot's name be substituted for that of Dr. McCallum as Corresponding Secretary for the Province of Quebec.

Dr. Rottot rose and said he would prefer that an English-speaking, practitioner should be chosen, as the Vice-President for the Province of Quebec was a French-speaking member.

Another amendment was proposed by Dr. Gilbert, that Dr. Hingston's name should replace that of Dr. D. C. McCallum. It was seconded by Dr. A. G. Fenwick.

A member said Dr. McCallum should not be elected, for he had not shown interest in the movement, not being in attendance.

Dr. R. P. Howard said Dr. McCallum was absent, not because of lack of interest in the movement, but simply because he was not named by the Faculty of McGill College to represent it at the Convention.

Dr. Hingston declined the honor, stating the Association would be better served by Dr. McCallum, and Dr. Gilbert withdrew his amendment.

Another amendment, proposed by Dr. Gauthier, named Dr. Penchaud as Secretary.

Dr. Scott, of Montreal, said Dr. Penchaud resided at Varennes, fifteen miles from Montreal, and thought it was desirable that the Secretary should reside in the same city as did the Vice-President, which was in Montreal. The ammendment proposing Dr. Penchaud was put to vote and lost.

The other amendment proposing Dr. Hingston was then put and carried, Dr. Hingston having consented to serve. Dr. Hingston was then declared the Secretary for the Province of Quebec.

Dr. A. G. Belleau, of Quebec, was then elected the General Secretary of the Association.

Dr. R. S. Black was then elected Vice-President for Nova Scotia, and Dr. DeWolff Secretary for the same.

Dr. Botsford was elected Vice-President for the Province of New Brunswick, and Dr. W. T. Harding Secretary for the same.

On the motion to elect Dr. Hodder, of Toronto, as Vice-President of Ontario, being put, Dr. Richardson, of Toronto, moved that Dr. Beaumont's name be substituted.

Dr, Dickson of Kingston, gave the reasons why the committee had named Dr. Hodder. Dr. Beaumont's name was not mentioned at all in Committee. Dr. Hodder held the highest gift of the College of Surgeons in his possession, viz., the Fellowship, and had done as much as any one in Ontario to advance medical education. He

had also been engaged in teaching medicine for the past twenty-seven years, and was still so engaged.

Dr. Aiken, of Toronto, supported Dr. Hodder, and gave his reasons for so doing. Dr. Hodder would have been here had it been possible.

The amendment naming Dr. Beaumont as Vice-President for Ontario was put and lost. Dr. Hodder was then elected. Dr. Canniff, of Belleville, was then elected Secretary for Ontario.

Dr. R. H. Russell, of Quebec, was then elected Treasurer of the Association.

After some further conversation, the Convention adjourned at 5 o'clock, to meet the following morning at 9 o'clock.

#### SECOND DAY, OCTOBER 10th.

Nine o'clock this morning was the hour named for the Association to re-assemble; but the dissipation of the previous night made many rise somewhat later, and it was quite ten o'clock when Dr. Tupper, C. B., took the chair, and called the meeting to order. Dr. A. G. Belleau, the General Secretary, then read the minutes of the previous day's proceedings, which, after one or two slight corections, suggested by Dr. Marsden, of Quebec, were declared confirmed.

Dr. Sangster, of Toronto, rose and said he had observed that the morning papers had stated that the reporters from the press had been refused admission to the meeting of the Convention. If such was the case he certainly thought a mistake had been made, and that no time should be lost in rectifying it.

Dr. Marsden, of Quebec, rose and offered an explanation. The Quebec Medical Society who had called the convention together had decided that as many private details would have to be arranged at the opening of the convention, not to admit reporters, but the moment the Canadian Medical Association was formed, the functions of the Quebec Society ceased. He thought that after that reporters should have been admitted.

Moved by Dr. Canniff, of Belleville, seconded by Dr. John R. Dickson, of Kingston,

That the members of the Press be admitted to all the deliberations of the Canadian Medical Association.—This was carried unanimously, but we did not see that any representatives of the fourth estate made their appearance.

Dr. A. M. Rosebrugh of Toronto, said that as considerable expense would be incurred in the first working of the Association, he would move, seconded by Dr. Marsden of Quebec, that the members present be assess.

ed in the sum of four dollars for the current year, and that that sum be paid forthwith to the Treasurer.

Dr. Rousseau, of Quebec, proposed in amendment, seconded by Dr. Fortier, of St. Clet, that the subscription to the Association for this year be \$2.

A good deal of discussion ensued both upon the original motion, and upon the amendment. Many seemed to be of opinion that if the subscription was only \$2, a greater number of country practitioners would join. Finally Dr. Rosebrugh withdrew his motion for \$4, when Dr. Hingston of Montreal moved, seconded by Dr. DeWolf of Halifax, that the annual subscription be \$3. Some further discussion took place, when the motion for \$3 was put and carried by a small majority.

The Treasurer then opened his books and the members present began rapidly to pay their subscriptions.

Moved by Dr. J. B. Gibson, of Dunham, County of Missisquoi, seconded by Dr. P O. Tessier of Quebec.

That a committee of seven members shall be appointed to frame a constitution and by-laws for the government of the Canadian Medical Association, to report at the next annual meeting, and that the following gentlemen do form the said committe:—Dr. J. E. Landry, of Quebec, Dr. Marsden, of Quebec, Dr. Peltier, of Montreal, Dr. W. H. Hingston, of Montreal, Dr. H. H. Wright, of Toronto, Dr. J. H. Sangster, of Toronto, Dr. Canniff, of Belleville,—This motion was carried.

Dr. Dickson of Queen's College, Kingston, moved, seconded, by Dr. Francis W. Campbell, of Montreal, that the following be a committee to consider the question of preliminary education, and to report at the next meeting; Dr. Sangster, Toronto,; Dr. Parker, of Halifax; Dr. Sewell of Quebec; Drs. R. P. Howard and Rottot Montreal; Dr. Hamilton, of New Brunswick; Dr. Aiken, of Toronto; and Dr. Painchard, Varennes.

Dr. McNeil Parker, of Halifax, rose and made the suggestion that at the close of the conference the various committees should meet and arrange preliminaries as to how the subjects allotted them should be taken up.

The President then remarked that the more correct form to bring forward the resolutions would be simply affirming the necessity for the formation of committees; afterwards, to name the committees.

It was then proposed by Dr. Landry of Quebec, seconded by Dr. Blanchet of Quebec, that a committee be appointed to report on such means as will insure a uniform and elevated standard of Medical education throughout the Dominion of Canada, and to report at the next meeting of the association.—Carried.

The following gentlemen were then proposed and elected members of the said committee: Dr. F. A. H. LaRue, of Quebec, Dr. J. R. Dickson, of Kingston, Dr. R. P. Howard, of Montreal, Dr. H. H. Wright, of Toronto, Dr. Trudel, of Montreal, Dr. James H. Richardson, of Toronto, Dr. C. V. Berryman, of Toronto, Dr. E. D. Worthington, of Sherbrooke, Dr. McMaster, of Toronto, Dr. D. Burdett, of Belleville, Dr. W. Bayard, of New Brunswick, Dr McNeil Parker, of Nova Scotia, Dr. P. O. Tessier, of Quebec, Dr. C. F. Painchand, of Varennes.

It was then moved by R. H. Russell, M. D., of Quebec, seconded by W. J. Aiken, M.D., of Toronto, that a Committee be appointed to report on the best means of having a uniform system of granting licenses to practice medicine, surgery, and midwifery in the Dominion of Canada—Carried.

Dr. Russell was proceeding to speak upon the necessity which existed for some action being taken, when Dr. Sangster, of Toronto, suggested that it would be better not to enter on the discussion just now, so little time being at their disposal, but to wait the report of the Committee which would be appointed.

This being the general opinion, Dr. Russell did not continue his remarks.

Some discussion took place as to the *personnel* of the Committee. Several members stating that there seemed to be too much the idea that none but members, "professors or lecturers" of schools should be appointed on these Committees. The profession outside of the schools had as much at stake, and as much interest in this matter, as had the schools, and they trusted a fair representation would be given them.

After several lists had been suggested it was it length decided that this Committee should be the same as the Committee on medical education, substituting that of Professor George W. Campbell, of McGill University, Montreal, for that of Professor R. P. Howard.

Moved by Dr. W. H. Hingston, of Montreal, seconded by Dr. E. Robillard, of Montreal, and

Resolved.— That a committee of eleven members be named to report on the best means of obtaining a system of vital statistics, and that the following gentleman be elected members of the said Committee: Dr. J. C. Taché of Ottawa, Dr. F. H. A. LaRue, of Quebec, Dr. G. E. Fenwick, of Montreal, Dr. Hingston, of Montreal, Dr. Canniff, of Belleville, Dr. Bayard, of New Brunswick, Dr. H. S. Muir, of Halifax, Dr. L. Tassé, Dr. Harding, of New Brunswick, Dr. Beaubien, of Quebec, and Dr. Thorburn, of Toronto.

Moved by Dr. N. De Rainville, of St. Barthoelmie, seconded by Dr. R. Lindsay, of Quebec:

That a Committee of seven members be formed to consider the best means of securing the proper registration of licensed practitioners in medicine throughout the Dominion of Canada.

Proposed in amendment by Dr. H. H. Wright, of Toronto, seconded by Dr. W. T. Aikins, of Toronto.

That the Committee to consider the question of Registration be the same as the one on By-Laws.

The amendment being put to vote was declared carried.

On suggestion of Dr. Hingston who said his time would be so much occupied on the Committee of Statistics, and other Committees, the name of Dr. Francis W. Campbell of Montreal was substituted for his own, in the registration department of the by-law Committee.

The question of appointing a Committee on the subject of Hygiene was discussed at some length. Some considered the subject of sufficient importance to demand a separate Committee, but the majority decided that the subjects of Statistics and Hygiene were so intimately connected that it was impossible to separate them. The question of hygiene was then by unanimous consent referred to the Committee on Statistics—a motion being made by Dr. Hingston of Montreal, seconded by Dr. Robillard of Montreal, to the effect "that the Committee on Statistics be styled the Committee on Statistics and Hygiene."

The following were named a committee to draw up a code of Medical Ethics for the government of the profession, viz. Drs. Marsden and Sewell, of Quebec; Dr. T. S. Parker, of Guelph; and Dr. A. M. Rosebrugh, of Toronto, Dr. Hamilton and Dr. Wadell, St. John, N. B., Dr. J. B. Garvie, of Halifax; and Dr. Steverman, of Lunenburg, N. S., Drs. Munroe and Peltier, of Montreal; Dr. Bovell, of Toronto; and Dr. Burdett, of Belleville.

Moved by Dr. Sangster, of Toronto, seconded by Dr. Parker, of Halifax, Nova Scotia, and it was unanimously

Resolved that the cordial thanks of this Association are due and are hereby tendered to Dr. J. A. Sewell, the President of the Quebec Medical Society, and to the members of the same society for their earnest and continued exertions in the originating and carrying to a successful issue the formation of a Medical Association for the Dominion of Canada, and the members of this Association cannot separate without giving expression to their very high sense of the courtesies extended to them and their appreciation of the very excellent arrangement for the comfort and convenience of the delegates.

This resolution was carried amid enthusiastic applause.

The question of the next place of meeting was then taken up. A com-

mittee was spoken of to select the place, but it was decided to settle upon the place of meeting in open conference. Dr. Tupper remarked that it would give the Medical Profession of Nova Scotia, and especially of Halifax, very great satisfaction if that city, all things being equal, could be selected as the next place of meeting. As that occasion, however, would be one of very great importance, if it was thought a full attendance could not be obtained at a place so remote as Halifax, they would forego the pleasure, for the good of the Association—in the hope that when the Association was in full working order, it would give them the pleasure of a visit.

Dr. Sangster, of Toronto, said that all local considerations should be abandoned for the general good, and he knew of no place so likely to secure a large attendance as Montreal. He had great pleasure in proposing that the first Annual Meeting of the Canadian Medical Association be held in Montreal, on the first Wednesday in September, 1868. This was seconded by Dr. Gilbert of Hatley.

Dr. Wright, of Toronto, moved in amendment, and seconded by Dr. Canniff, of Belleville, that the time of meeting be changed to the first Wednesday in June.

Some discussion ensued—but on the amendment being put to vote it was lost, and the main motion, naming Montreal as the place of meeting, and the first Wednesday in September as the time, was carried by acclamation.

The members from Montreal present assured the Association of a warm welcome from the profession in that city. The question of arrangements was left to the Montreal members.

Moved by Dr. R. P. Howard, of Montreal, seconded by Dr. Parker, of Halifax, Nova Scotia, and

Resolved unanimously that the thanks of this Association are due to the Rev. Mr. Methot, Rector of Laval University, for the kindness and public spirit with which he has afforded accommodation to the Association at its first meeting, and are hereby tendered.

Moved by Dr. Parker, of Halifax, seconded by Dr. DeWolf, of Halifax,

That all payments of monies connected with the Association shall be on the order of the Vice-President, contersigned by the Secretary of the Association,—Carried.

Moved by Dr. Worthington, of Sherbrooke, seconded by Dr. Gilbert of Hatley,

That the proceedings of this conference be published in the Canada Medical Journal, and that 300 copies of that journal be sent to the various Vice-Presidents for distribution, also that 200 copies of the proceedings of the conference be struck off in French in pamphlet form, under the care of the editors, and that they be distributed among the members. Carried.

It was announced that the various committees would meet in Montreal two days previous to the next annual meeting to arrange finally their reports.

Dr. Tupper was requested to leave the chair, and Dr. Sewell was called thereto. It was then moved by Dr. W. E. Scott, of Montreal, seconded by Dr. R. P. Howard, of Montreal, and resolved, that the thanks of this meeting be voted to the Honorable Dr. Tupper, C.B., for his able and impartial conduct in the Chair, which has contributed so much to the success of the meeting.

Dr. Tupper having briefly replied, he declared the meeting adjourned to meet in Montreal, on the first Wednesday in September, 1868.

#### VISIT TO BEAUPORT LUNATIC ASYLUM.

In accordance with the invitation given the previous day, those members of the Association whose time permitted, found on the adjournment of the meeting that ample provision had been made to transport them in ease and comfort to Beauport Asylum. At 2 o'clock upwards of thirty carriages, in which were a number of ladies, left the Laval University for Beauport.

The day had opened gloomy and wet, but brightened up about noon, and made the drive a most agreeable termination to the proceedings of the Conference. So lovely was the drive that almost too soon the Asylum was reached. A grand triumphal arch was erected outside the entrance to the grounds, and a perfect plantation of well-trimmed evergreens marked the long line of carriage drives through the lawn that fronts the spacious buildings. The proprietors, Dr. Landry and Dr. Roy, received their guests at the principal portico, and after the usual interchange of compliments, showed the whole party round the premises. Attended also by Superintendents Vincelet and Mrs. Vincelet, and the Resident Physician, Dr. Pickup, the visitors proceed along the entire suite of rooms on one floor, ascending the end stairway, and returning through the suite of rooms above, passing through corridors, refectories, dormitories, parlours, and sleeping apartments and cells, till each of the buildings devoted respectively to the male aud female patients had been thoroughly inspected, and nearly all of the 614 patients seen.

#### THE LUNCH.

The visitors having completed their inspection of the Asylum, were shown into a spacious hall where a sumptuous lunch was spread for them

The hall was nicely decorated with flowers and evergreens, interspersed with mottoes of welcome.

Dr. Landry, after the customary loyal toasts, proposed the health of Dr. Tupper, the President of the Association. He alluded to the success which had attended the efforts of the medical men of Quebec to bring the profession more closely together, and congratulated all upon the choice they had made of Dr. Tupper as President. The Association was started under good auspices and must succeed. The presence of so many medical men was highly complimentary to the Asylum, and Dr. Roy and himself were proud of the opportunity of showing how such institutions were managed. The institution had met with every support from the government of the former Province of Canada, and hoped to deserve assistance from those who were now in power, almost by public acclamation. The proprietors had but one feeling, that of thankfulness for the past, and confidence for the future, and heartily welcomed the association and its distinguished President.

DR. TUPPER acknowledged the toast in a happy manner. After referring to the honor conferred upon him by the profession, he spoke of the kindness he had met with from his Confreres, throughout the Dominion, and more especially at the Convention. From the first hour he had become acquainted with Quebec and its inhabitants, he had formed an impression of the great advantages attendant upon an alliance of his own province with those to which she was now united. He would earry away with him a most grateful recollection of his reception here and the hospitality extended to him. The ball of last evening had given him a livelier and still more exalted idea of the loveliness and refinement of the ladies of Quebec. He had often wondered how so remote a city as Ottawa could have been selected as the seat of Government, but he now saw how desirable it was that the grave business of legislation should be disposed of elsewhere than amidst such continuous scenes of fascination and excitement as had been presented in this gay city of Quebec. His friends the delegates to the Medical Convention were deeply sensible of the attentions they had received, and particularly from the proprietors of this the most important institution of Lower Canada, an institution which appealed to the sympathies and feelings of all, and which was conducted in a manner reflecting the highest credit upon the country and the gentlemen who have undertaken its management. He concluded by asking permission to propose the toast of "The Ladies of Quebee" which was enthusiastically received.

Dr. Landry proposed "The Delegates to the Convention." The medical men of Quebec heartly welcomed their brethren of the Domins

ion, and trusted that the acquaintanceships which had been formed, would long continue. There could be no doubt of the benefits of intercourse of this kind between members of the same profession.

The toast was briefly responded to by Dr. Parker, of Halifax, Nova Scotia, Dr. Dickson, of Kingston, and Dr. Rottot of Montreal.

The guests then re-entered their carriages, and returned to Quebec. Thus was brought to a close, the first Medical Convention ever held in Canada. On all hands it is admitted to have been a very great success, even beyond the anticipations of its most sanguine projectors. An Association started under such auspices, has the elements of vitality, and we are much mistaken, if the Canadian Medical Association, does not soon take rank, as the leading scientific Association of the country. The profession of the Dominion owe a debt of gratitude to the Quebec Medical Society, the callers of the Convention. They must feel amply repaid for their exertions (which must have been great) by the success which has attended them.

## PERISCOPIC DEPARTMENT.

## Medicine.

GENERAL RULES FOR DIAGNOSIS AND TREATMENT OF DISEASES
OF THE HEART.

By David Wooster, M. D. Rules for Diagnosis.

I. If the patient, otherwise in good health, complain of uneasiness in the præcordial region, cardiac disease may be suspected.

II. If a murmur is heard at the base, systolic in time, (that is, with the first sound of the heart,) which diminishes in intensity as the ear is moved towards the left nipple, it indicates roughness of the aortic orifice.

III. If a systolic murmur be heard at the præcordia, and if it increase in intensity as the ear is moved toward the left nipple, and diminish as the ear is moved up the sternum, it indicates mitral regurgitation, that is, insufficiency of the mitral valves.

IV. A murmur heard at the base of the heart, (about the junction of the third ribs with the sternum,) thence down the sternum, coincident with the diastole, (second sound of the heart,) indicates aortic regurgitation. If to this sign be added visible superficial pulses, and a hammering pulse at the wrist, aortic regurgitation is certain.

- V. A murmur coincident with the second sound heard about the left nipple, or in the fifth interspace below and to the right of the left nipple, and along the heart towards its base, and nowhere else, indicates mitral constriction. [This murmur is very rarely heard.] If to this be added a slight cough, the lungs being sound, and hypertrophy of the right ventricle—mitral constriction is indubitable.
- VI. A murmur heard loudest above the base of the heart in the upper part of the thorax, indicates aneurism of the aorta, or innominata, or subclavian artery. If to this sign be added a pulse of unequal strength in the two wrists, or absent in one wrist, aneurism is almost certain. Difficulty of deglutition and paroxsyms of dyspnæa add greatly to the probabilities of aneurism; indeed, with the preceding signs, render it indubitable.
- VII. If there be bulging of the left side, near the mid sternum, and heaving impulse of the heart, and strong full pulse, there is hypertrophy of the heart.
- VIII. If there be a visible undulatory impulse, or heaving of chest, if the pulse be not strong nor very resistant, if the first sound of the heart be clear and more distinct, and seem nearer the ear, and have more of a knocking character, there is dilatation of the heart. If there be much bulging of the interspace, and if the pulse be strong enough for hypertrophy; if the apex be outside of the left nipple and below the sixth rib, there is hypertrophy with dilatation. If there be also dropsy of the lower extremities, the probabilities of dilatation become certainties.
- IX. Basic murmur, coincident with first sound heard loudest at the junction of the third costal cartilage with the sternum, and thence down the sternum, attended with persistent and jugular pulse, indicates almost positively tricuspid regurgitation—insufficiency of the tricuspid valves: if to these two signs general turgidity of the venous system be added, tricuspid regurgitation becomes certain.
- X. An endocardial murmur, whether systolic or dyastolic, whether at the base or apex, heard suddenly during course of an acute rheumatism, or after a violent blow on the pracordia, or during Bright's disease of the kidneys, indicates endocarditis in the most positive manner.
- XI. An attrition or friction sound heard over the præcordia, that is, over the fifth left costal cartilage, while the patient holds his breath, indicates pericarditis in the most positive manner.
- XII. Softening of the heart, without fatty degeneration, occurs only in cases of asthenic or adynamic diseases of an inflammatory nature. If in such cases the pulse grows feeble out of ratio with the intensity of the adynamic disease—for example, a typhus or typhoid fever—and remains weak

and unequal, become easily excited and fluttering, if at the same time the patient feel steady præcordial uneasiness, softening, of the non-fatty variety, is extremely probable.

- XIII. If the same symptoms mentioned in the foregoing rule be observed in a bon-vivant of luxurious and idle habits, especially if he be at the same time an intemperate drinker, fatty degeneration of the heart is almost indubitable. If to these symptoms be added epileptiform seizures, and if the respiration varies greatly in uniformity as to frequency and force without any external cause, and at the same time the patient be over forty years old, fatty degeneration may be considered certain.
- XIV. Angina pectoris cannot be mistaken if the suffocation, præcordial pain, the dread of imminent death, have once occurred, so as to be described by the patient in these or similar terms, without having been questioned by the physician. The symptoms pertain, in their clearness and pertinence, to no other affection.
- XV. A murmur coincident with the first sound heard at the base and propagated up the aorta, in an anemic person, whose blood under the microscope exhibits defect of red or excess of white globules, is an inorganic murmur, and indicates merely altered condition of the blood, or altered dynanism of the heart.

#### PRINCIPLES OF TREATMENT.

- I. The first and most important principle to be kept in view in treating a diseased heart, is, to diminish the labour it has to perform.
- II. This is done in two ways. Directly, by diminishing the amount of blood in the body; by diminishing the functional activity of all the organs not concerned in secretion, and by increasing the functional activity of the skin, liver, kidneys, lungs and alimentary canal.
- section, or from the præcordia by cups, when from general plethora or overwhelming local congestion, a sudden diversion to tha blood-current is deemed essential; or the total quantity of blood in the system may be diminished by reducing the weight of the body—the loss of eight pounds of weight is the loss of one pound of blood. Blood never is to be taken with a view of cutting short an inflammation, or curing either an acute or chronic affection, but merely for the purpose of relieving an urgent symptom, or arresting an imminent catastrophe. On the other hand, bleeding is not so hazardous as many would wish us to believe. If the digestive organs are unimpaired, loss of blood by hemorrhage is restored with astonishing rapidity. In this respect, anemia from traumatic hemorrhage or venesection is widely different from pathological anemia, depending on lesions of nutrition, assimilation and innervation; in short, on lesions of

all the organs of the body. Blood deterioration in this case is repaired with extreme slowness, and this is not to be used as an argument against venesection, leeching, or cupping. A few pints of beef tea will restore as many red globules as are removed by a copious bleeding.

- IV. So local bleeding, even in anemia of slow growth and long duration, is not always objectional to mitigate a threatening local symptom; For example: take a case in another department of pathology. A child of six months, more or less, badly nourished, with insufficient mother's milk, and cow's milk and farinaceous mixtures, has chronic diarrhea. If in the course of treatment we intentionally diminish without arresting the diarrhœa, the child now has tonic spasm of the fingers and toes, the eyes pitch back under the brow, or look straight onward, seeing nothing; it rolls its head and moans, and starts with sudden shrieks. This child is anemic, very pale, waxy almost, but its head is burning hot. Now, if a single leech be applied at the anterior fontanelle and allowed to fill, and after it drops off, the bleeding be encouraged by the application of compresses wrung out of hot water, not only over the bite, but over the whole top of the head, for the space of a whole hour; if this be done within the first twelve hours after the tonic spasm becomes manifest, the chances are more than two in three the child will recover, providing it be nourished with beef juice, and medicated solely with minute doses of creasote subsequently, and kept warm at the abdomen and extremities. Now, this is a case in which an apology is needed: yet I have bled in twenty recorded cases in this manner, and in seventeen have had the satisfaction of seeing my little patients recover.
- V. As a general rule, depletion by bleeding is not required in diseases of the heart.
- VI. By abstinence from hard labour, mental or physical; by abstinence from all severe exercise, and by avoiding all violent emotions or passions, the demands of the heart are obviously lessened, and hence its labours are lightened.
- VII. By aperients regularly taken, by diuretics often repeated, by hepatic stimulants taken from time to time, by unobstructed access to the atmosphere at all hours of the day and night, by baths, frictions and abundant passive exercise, the functions of the liver, skin, lungs, kidneys and alimentary canal are certainly increased, and that not in a way to be detrimental to alimentation, assimilation and nutrition.
- VIII. Whatever degree of sedative impression we desire to make on the heart, must be made slowly, not suddenly. A violent blow on the pit of the stomach will stop the heart forever. A thousand light blows or a heavy weight would produce but little effect. Small doses of cardiac

sedatives, often repeated and carefully watched, are better than large ones however judiciously administered.

IX. The quality of the blood must be maintained as near the normal standard as possible, while its quantity may be diminished by restricted diet, and certain evacuants, in proportion as the disease of the heart advances.

#### TREATMENT OF MENORRHAGIA.

We have collected from some of the hospitals a few hints respecting the treatment of the different pathological conditions of which this symptom is so frequently an exponent, and these will probably be interesting as well as useful.

ST. BARTHOLOMEW'S HOSPITAL.—Dr. Greenhalgh remarks that by far the greater number of cases of menorrhagia are due to fibroid or fibrous out-growths or in-growths from the uterus, which are mostly treated by a pill composed of one-twelfth of a grain of bichloride of mercury combined with quinine and belladonna, to which is frequently added small quantities of the aqueous extract of aloes, taken night and morning for some weeks; a mixture composed of diluted sulphuric acid, tincture of Indian hemp, mucilage, liquid extract of ergot, syrup, and infusion of quassia, three or four times a day, being ordered just prior to and during the catamenial flow. Between the "periods" a draught of iodide or bromide of potass, with the liquid extract of ergot, sal volatile, and infusion of quassia, is given twice a day. If the loss of blood have been very great, or the patient be anæmic, the tincture of sesquichloride of iron with the liquid extract of ergot, chloric ether, syrup, and infusion of quassia, twice or thrice a day, with the pills, are prescribed. Where the patient is more or less plethoric, which is rarely the case, the sulphate of magnesia and digitalis, either with dilute sulphuric acid or salines, and scarifications or leechings of the cervix uteri, are found most serviceable in cases of subinvolution of the uterus attended with menorrhagia due to imperfect recovery from labour or miscarriage, hyperlactation, or other affections leading to constitutional debility, especially in the strumous habit, the syrup of the iodide of iron, with or without ergot, and with the pill above referred to, are found very efficacious. A similar course is pursued, sometimes with, sometimes without the pills, where the commencement of malignant disease is the exciting cause of this symptom.

In cases of Bright's disease and other affections interfering with the stasis of the blood, gallic or tanic acid, usually combined with henbane,

prove valuable hamostatics; some preparation of iron with arsenic being usually ordered between the "periods." Where polypi, portions of retained ovum, or fibrinous clots are detected, they are removed.

Dr. Greenhalgh particularly draws attention to the frequency of menorrhagia as the result of collections of feeal matter in the large intestines and rectum, and of hepatic derangements occasioning mechanical irritation and congestions of the hemorrhoidal vessels and uterus. For calculi, in additions to the pills, he prescribes repeated doses of the compound decoction of aloes with tineture of nux vomica.

In all cases he recommends quiet of mind and body; rest in the recumbent posture; nutritious and unstimulating diet; cold acid drinks; tepid or cold water vaginal injections: great moderation or total abstinence from sexual excitement.

He now and then has recourse to the following means: Matico-cotton plugs or pessaries; astringent vaginal injections; sponge tents; iodide of lead and atropine pessaries; iodized cotton; Hodge's and other pessaries in cases of misplacements of the uterus, &c.

Dr. Greenhalgh adds that cæteris partibus, menorrhagia is more prevalent among women of lax fibre, more especially if they have had many children or abortions in rapid succession; in those subject to acne, pruritus or eczema, and about the climacteric; in those of intemperate habits of various kinds, &c. He considers it is by no means always easy to determine whether the case is one of menorrhagia or threatened abortion.

University College Hospital.—In all cases Dr. Hewitt attaches much importance to rest during the "period." Daily use of the vaginal douches of cold water is a valuable means of diminishing the congestion and restoring the lost tonicity of the uterus. The tineture of iron, in doses of from fifteen to twenty minims three times a day, combined with a few drops of glycerine, is very frequently given, and found efficacious where the system is debilitated from repeated losses of blood. In many cases Dr. Hewitt administers a few doses of ergot in powder (half a drachm three times a day).

The point to which the greatest attention is directed is procuring an exact diagnosis of the state of the uterus. Obstinate menorrhagia is often, Dr. Hewitt says, found to be due to some physical alteration of the uterus, overlooked and consequently not treated. Of the latter class of cases, retroflection of the uterus is a most marked instance.

We would call attention to the advertisement of Dr. Canniff's work on Surgery. It is a first class book, and as a Canadian production, should be encouraged.

# Canada Medical Journal.

MONTREAL, OCTOBER, 1867.

## THE MEDICAL CONVENTION OF CANADA.

We publish in this number of the Journal the proceedings of the most important meeting of the Medical fraternity that has ever been held in Canada. It is in every respect a matter of rejoicing that the profession throughout the Dominion of Canada has met and established (we trust on a firm basis) a Canadian Medical Association. The main object of that meeting was the advancement of our noble calling—the elevation of our profession. All honour then to the projectors of that meeting.

We believe that the idea originated with Dr. Marsden of Quebec. but the details, work and arrangements were carried out by the members of the Quebec Medical Society. Much credit is due the gentlemen composing that Society for the handsome manner in which the members of the Convention were received and treated during their sojourn in Quebec. Now that the Association is formed, we would gladly see it prosper and become an instrument for good in the hands of each and every member of the profession. In this connection we may be excused for bringing before the notice of our readers the Canada Medical Journal, and in doing so we desire to enter most fully into an explanation of our position as editors of this periodical. It will be observed that this is the fourth year of our literary existence. The journal is published by the Messrs. Dawson Bros, at their own risk, and thus far there is a broad margin against the publishers: as an enterprise, therefore, it is not a paying one. We, the editors, have no pecuniary interest in the periodical. Our only desire, hitherto, has been to see our profession well and liberally represented by a periodical of a purely literary character. There is no good reason why the circulation of our journal should not be four or six times what it is, and this could be effected by concerted action. There are numerous members of the profession throughout the Dominion who would become subscribers to the journal were they solicited; their names and residences we have not got, nor is there any means at our disposal of acquiring the information. We call then on all members of the profession to whom this number is sent, to forward to the publishers a list of practitioners in their immediate vicinity, with their names and address, who

would be likely to become subscribers; but it is not alone subscribers we need, we would solicit literary aid. If each member of the profession would take the trouble to note down the particulars of any special case and forward them for publication, we will undertake to see them fairly through the press. Now that a Medical Association in the Dominion of Canada has been most happily inaugurated, we would be glad to see this journal become the organ of that Association, and if, as we trust, a larger circulation is obtained, the journal can be augmented in size, or if it remains as at present, the subscription if thought excessive, can be lessened. These proposals we make in good faith: we are alone solicitous of shielding the liberal publishers of the journal against pecuniary loss, and at the same time, of making the journal the recognised organ of the profession throughout the Dominion of Canada, Indeed, were it possible, we would gladly publish the journal every week, but to do this we would necessarily require a regular corps of contributors. For the present such a project is impossible, but we do look forward to the day when in Canada there will be published each week the doings and observations of so important a body as the members of our profession. Medicine and Surgery are advancing rapidly as sciences, and we do not think that in Canada we are much behind the timesindeed, if we except the published results of our experience, which are meagre, we must admit from personal observation and knowledge of what is doing amongst us, that the profession in Canada will compare favourably with any country in the world.

## DISTRICT OF BEDFORD MEDICAL SOCIETY.

We are glad to notice that our friends in the District of Bedford are alive to the advantages which may be derived from forming themselves into a society. At the request of a number of practitioners, Dr. Gibson called a meeting of the profession of the District at Sweetsburg for the 28th of September, and on that day the following gentlemen were in attendance. Drs. Chamberlain, Brigham, Gibson, Cotton, Meigs, Battersby, Erskine, Hamilton, Jamieson, Wood, McGowan, Chevalier, Brown, Bowell, Smith, Kennedy, Whitwell. Dr. Chamberlain was called to the chair, and Dr. Whitewell requested to act as Secretary. On motion of Dr. Gibson, seconded by Dr. Brigham, it was resolved that the practitioners of the District of Bedford, Province of Quebee, do form themselves into a society, to be called "The District of Bedford Medical Society," and that the annual subscription be \$1. The following officers were elected for the present year." President, Dr. Chamberlain. Vice-President, Dr. Charles Battersby. Secretary-Treasurer, Dr. Whitwell. Executive Com-

mittee, Drs. Brown, Erskine and Meigs. The Committee were requested to draw up a code of by laws. After a vote of thanks to the chairman the society adjourned to meet at the same place on the 8th January next.

We wish the society every possible success, and will at all times be happy to publish its proceedings, which we trust our friend and old fellow student—the Secretary-Treasurer—will forward to us. The present information we glean from one of our daily city papers.

#### TO OUR SUBSCRIBERS.

We are extremely anxious to obtain as complete a list of the members of the profession in the Dominion of Canada as is possible; unfortunately we are unable to get it from any official source, and have therefore to make an appeal to our subscribers. If every physician who receives the Journal, would take the trouble to forward to us a list of the practitioners in his neighbourhood, we would get a fair list, and we respectfully ask them to do us this favour, at their earliest convenience.

We again appeal to our subscribers for contributions. Subscribers in arrears would oblige the publishers by a remittance of the amount due.

## THE QUEBEC MEDICAL SOCIETIES BALL TO THE DELEGATES.

The ball, which was given to the members of the Canadian Medical Association by the Quebec Medical Society, took place in the evening of the 9th October, in the Music Hall, and was a gathering which did credit not only to the Society, under whose auspices it was undertaken, but to the ancient capital itself. Between eight and nine o'clock the guests began to arrive—and at half-past nine the Lieut. Governor, Sir N. F. Belleau (who was received at the entrance by a guard of honor from the 9th Volunteer Battalion), entered the room, the Band of the 30th Regiment playing the National Anthem. By eleven o'clock the Music Hall presented a gay appearance, the only drawback being its somewhat crowded state, the bright uniforms of the regulars and the volunteers contrasting well with the more sombre dress of the delegates. Dancing was kept up with unusual vigor till an early hour in the morning, staid professors of medical universities, in whose countenance a smile is seldom supposed to appear, tripping the light fantastic toe with an energy that showed how fully they appreciated the opportunity the Quebec Medical Society had afforded them of forgetting for the nonce the weightier matters which occupied the attention of the Association. At midnight a splendid supper, embracing everything that the most fastidious could desire, was spread in the large dining hall of the St. Louis Hotel, to which every guest did ample justice, nothing stronger than tea and coffee being supplied.

## CANADA

# MEDICAL JOURNAL

#### ORIGINAL COMMUNICATIONS.

A case of Retroversion of the Impregnated Uterus. By DAVID L. PHILIP, M. D., C. M. Coroner for the County of Oxford, &c. Platsville, Ontario.

In October last I was requested to visit Mrs. W. by her husband, who informed me that within the past few days she had become dropsical, that she was suffering great pain, and that if not soon relieved he believed she would die. On visiting the patient who lived about five miles distant, I obtained the following history. She was about four months advanced in pregnancy and had enjoyed excellent health up to within four days, when on going about her ordinary household duties "she felt something give way" she felt no great pain at the time, but on attempting to void her urine, she found she was unable, she strained violently, applied hot fomentations and used some domestic remedies for the water, but without any effect. She says a little urine comes away from her now (Stilicidium urinæ) in drippings. Her bowels have been constipated, passes some slight watery stools and flatus, her sufferings during the past twelve hours are distressing; she feels as if her belly would burst, and earnestly entreats to be relieved. At present the pulse is quick with high fever, flushed countenance and hurried respiration; on examining the abdomen, there is a large tumor extending to the umbilicus and reaching almost from one ilium to the other, very painful on the slightest pressure. Suspecting the nature of the case, I requested to make a vaginal examination, and on introducing my finger I found a tumor occupying the cavity of the pelvis. I could not reach the mouth of the

· VOL. IV.

uterus, and the fundus of this organ was firmly wedged low down in the cavity of the sacrum, Not having a gum elastic catheter with me, and wishing to relieve her as soon as possible, I tried the ordinary female silver one, but the canal of the urethra was so elongated by being carried upwards and forwards to the Symphisis Pubis, that it would not, as I almost anticipated, reach the bladder. I therefore sent back for an elastic one, which necessitated some further delay, and having obtained it I introduced it with some difficulty and drew off (by measurement) eight pints of fetid ammoniacal urine. Having accomplished this, and after giving a stimulating clyster, which brought away a considerable quantity of feculent matter, I determined if possible on immediately reducing the retroverted womb. Placing her in the usual obstetric posture, I passed the fingers of my right hand into the vagina, over the body and fundus of the womb, and with my thumb inserted into the rectum, which placed the retroverted organ favourable for reduction, I made an increasing amount of pressure for about fifteen minutes, but failed to move it in the slightest degree, so tightly was it impacted. The patient being somewhat discouraged at the attempt to dislodge it being unsuccessful, I allowed her an interval of rest as she was very much exhausted, and gave her a glass of wine and water. I resolved if possible to reduce it, believing that delay would only increase the difficulty and that there was " no likelihood that the womb would right itself by drawing off the water regularly and as recommended by Denman, Hunter and others. In my second attempt therefore I determined to use as much force as was compatible with safety. Placing her upon her knees and elbows, with the pelvis higher than the abdomen, in order to remove the pressure of the viscera, and having oiled my right hand I now passed it with as little severe pressure as possible entirely into the rectum, which was gradually accomplished, and with much less suffering to the patient and difficulty to myself than I could have imagined. I now got a bearing upon the fundus, and after using continued and strong pressure for about twenty minutes, I moved it somewhat. I was then enabled with a finger of my left hand to grasp the cervix and draw the os downwards, whilst at the same time I pushed the fundus upwards, which was managed with a good deal of difficulty. Some delay was experienced in getting it over the promontory of the sacrum, but in about half an hour from the time I commenced it passed out of its tightly impacted position in the hollow of that bone. She was ordered to keep her bed for a fortnight, and recovered without a bad symptom. I attended her in her subsequent confinement when she was safely delivered.

Plattsville, Ontario, October, 1867.

#### TREATMENT OF DISEASED JOINTS BY ESCHAROTICS.

By Frederick Kirkpatrick, M. D., F. R. C. S. I. (Read before the Thirty-fifth Annual Meeting of the British Medical Association, held in Dublin, August 9, 1867.

I AM permitted the honour of addressing you, sir, and the Members of the British Medical Association, upon the subject of diseases of the bones and joints, principally with regard to a new mode of treatment by nation, and the deep introduction of caustic, (the potassa c. calce,) into the cancellated structure of the articulating extremity of the bone in the incipient stage, or that of inflammatory congestion, and into the joint itself in the very advanced periods. I believe that the present era of the Profession is peculiarly apt for the consideration of this subject, inasmuch as the literature of this portion of surgery is daily becoming more and more unsettled and contradictory, some surgeons of highest authority advocating early operative interference, whilst yet the constitution is unimpaired by the exhausting progress of disease; other distinguished men putting their faith in rest, with proper mechanical adjustment, and advising that patient trust should be placed in the healing operations of nature.

Between those contrasted extremes every variety of opinion and practice may be found to prevail, as boldness excites to action, or caution inclines to delay.

The statistics of conservative surgery, more particularly of the great revived operation of the knee-joint, are the reverse of satisfactory; the high expectations formed from the successful cases have not been fulfilled by a sufficient percentage of cures, and in may instances the reported cures have not been permanent.

In the last work on joint diseases, published this year by Mr. Holmes Coote, of Bartholomew's Hospital, the following conclusions are arrived at, based on the statistics of Dr. Hodges, of Boston:—"Considering the mortality after the operation, excision for hip disease does not merit a very favourable verdict. Excision at the knee, although occasionally yielding brilliant results, is an operation to be practised with great reserve. Excisions at the wrist-joint being followed by a large proportion of failures, and when successful, the usefulness of the hand being so limited, are operations not sanctioned by sound judgment or conservative surgery. Operations on the foot for strumous disease, usually yield unsatisfactory results."

Dr. Hodges, of Boston, in his "Essay on the Excision of Joints," observes:—"Out of a considerable number of cases, one-third died, and more than one-third are known to have failed." I repeat then that a

period has arrived when doubt and uncertainty pervade this most important department of surgery, and it has become a question as to whether there was not a greater saving of human life, when early amputation was the rule, than in the interval that has since passed over. It is also especially worthy of remark, that excision has rarely, if ever, been performed in private practice.

At the commencement of his magnificent address at Chester, Mr. Bowman, that great benefactor of his race, called surgery "the hands of God, the human hands." I may be permitted to add, hands never to be put, forth to the execution of any operation, but when their possessor can say he would himself consent to its performance were he the patient. I believe that the rigid application of this golden rule in surgical ethics, would very much limit the future performance of operations for excisions, saye only at the elbow-joint.

In the surgical charge of the North Union, the largest chronic hospital with one exception in this country, I have had, during the last twenty-five years, ample opportunity of judging of the effects of rest in the treatment of those affections, and the result of my experience has been most unfavourable.

A certain amount of success may be looked for in the treatment of the upper classes, where the purest air, the best nourishment, the most approved mechanical appliances, together with the means of easy locomotion can be commanded; but, with the lower classes, I have found that the treatment by rest has been a history of failure: disease spreading from bone to bone in the smaller articulations, and before the consolidation of a large joint could be completed, organic disease having, in general, invaded the liver, or some of the other internal organs.

This unsuccessfulness forced me some years ago into the discovery of this treatment by cauterization, which I propose. Having often remarked the healthy reparative action that followed the use of the potassa c. calce in sinuses in the groin, neck, and axilla, I began to introduce it into fistula leading down to diseased bone, at first with caution, then more boldly, and finally disregarding Sir B. Brodie's stong injunctions against letting potassa fusa enter a sinus, I proceeded to carry its action deeply down, converting the small contracted painful orifices into large funnel-shaped openings, and bringing the carious bone into view, and within reach of the further application of the caustic. In this manner, several cases of disease of the carpus and tarsus, and of the flat and superficial bones, were successfully treated, the caustic being re-applied at intervals of a few days, to keep the orifices freely open until the carious bone had disappeared, of was covered over with firm granulations.

In a similar manner, several cases of chronic necrosis were treated, the caustic being very freely used, destroying all foul undermined integument, and leaving, after the removal of the sloughs, large clean circular openings, more than an inch in diameter, and extending deeply down to the sequestrum, into contact with which the caustic, in stick and powder, was freely brought.

In this manner, two cases of necrosis of the fibula, very similar to each other, in which numerous openings led down to diseased bone, and where the patients were reduced to the lowest state by years of suffering, were perfectly cured within six months.

In a case of necrosis of the heel in a delicate lad, who was deformed by the effects of an old hip disease, a caustic perforation was made at each side of the heel, and the powder was brought into contact with the dead bone, until it was so removed that a catheter was passed quite through the heel, no inflammation or constitutional disturbance having been caused or excited.

I can speak with the utmost confidence of the application of this remedy in all such cases of caries affecting the superficial bones.

The caustic perforations may be multiplied in proportion to the extent of the disease, respect being paid to important nerves and vessels, and care being taken not to destroy sound structure, or periosteum beyond the limits of the diseased surface of the bone. Before I speak of the application of this remedy to the early arrest of the stage of joint disease, I may be permitted to allude to the important question as to the structure which is first attacked.

My own opinion accords with those authors who believe that in the great majority of cases the disease commences in the cancellous structure of the heads of the articulating bones. That there are rare cases where it begins in synovial membrane or cartilage, and mixed ones which, seen at a late period, may perplex diagnosis, I fully believe; but I consider that those instances where the fons et origo mali arises in the bone, preponderate so enormously that, as a rule of practice, it cannot be too strongly insisted upon. My own opportunities of obtaining pathological evidence have left me without a doubt on the subject, and the practice which I propose is based upon that conclusion.

In Sir B. Brodie's great work on the joints, he recognises the cancellous structure, and he describes the heads of the bones as distended, with a reddish medullary fluid, then softening of the tissue, and finally suppuration—the matter either forcing through to the cavity of the joint, or reaching the surface at some position more or less remote; but whilst he hus clearly recognises the cause, and graphically describes the disastrous effects, he forbids the remedy, and strongly cautions against an early or premature opening, although he had himself with success trephined the heads and shafts of the long bones in cases of painful and circumscribed abscess.

That he attempted to give relief in a similar manner in those cases of acute articular osteitis which he so circumstantially describes, is more than probable; and I therefore infer that his caution against the early opening of an inflamed bone, was founded on his experience of ill consequences that followed such a proceeding.

Notwithstanding the teaching of this great authority, I venture to propose interference by operation at the very earliest moment that congestive inflammation of the head of a bone can be fairly diagnosed; and I state with confidence that a perforation made into the cancellous structure, if freely cauterised with the potassa c. calce, will be followed with relief from pain, and that the inflammation which ensues will be only such as is attendant on and accompanies reparative action.

The caustic tunnel may be made at once by cutting down on the bone and piercing the compact tissue with a strong knife, trochar, or small trephine, and then freely cauterising the full extent of the perforation, or, in less acute cases, a small eschar may be first made, the centre of which being incised, the caustic can be introduced, and by combining its action with the knife, the tunnel can be carried deeper, from day to day, in a gradual manner. By means of this combined caustic perforation, I succeeded in arresting disease in its first onset in the head of the radius in the case of a young man, aged twenty-four, in the year 1861, Since that time I have tried it with success in several cases of incipient disease, in carpal, tarsal, and other superficial bones.

I perforated the tibia above the internal malleolus in several instances with curative results, also the great trochanter, in cases where its structure, or that of the head and neck of the femur, was the seat of osteitis, the cavity of the joint being yet unaffected.

On the 26th of last April I exhibited a young man at the Surgical Society of Ireland, into whose trochanter a caustic tunnel had been inserted on the 22nd of March preceding, and which was still freely open. The wasted buttock, obliterated fold of nates, and emaciated state of the entire limb, still existed to proclaim the nature of the disease; but all pain had ceased, the motions of the joint were in a great measure restored, and he walked about before the members of the society without lameness, although for three months previous to the operation his thigh was flexed, he had constant pain in his hip and knee, and he could not admit abduction or any extended motion of the limb. This patient took his discharge

to work on the 11th of May, the contour of the limb being almost restored to its natural fulness, and his general health quite recovered.

Although strongly recommending this treatment for the early stages of acute articular osteitis, and also for the very advanced periods when caries is established, or when a whole joint is converted into a foul suppurating cavity, my experience does not warrant me in advising the practice so strongly in the intermediate periods, where the head of a bone may be the seat of a diffused suppuration, possibly communicating with the joint itself. The caustic, I fear, in this condition of parts could not extend sufficiently to protect from the constitutional disturbance and risk of pyæmia that might follow.

The principal merit I claim for this caustic treatment is, that it is a powerful, and, at the same time, the safest means of correcting nature where she is manifestly in error, and of assisting her operations where they are directed aright. And here, sir, I have the boldness to start from out the well-worn professional groove of bestowing a blind admiration upon the proceedings of nature, as seen in her efforts to restore and repairdiseases of bone. Instead of the vis medicatrix, which is so perfect, and to be relied on in many of our ills, I assert that she exercises in those affections a vis inimica a vis permiciosa.

From the first onset of inflammation within the cancellous structure, all through the various destructive processes that ensue, she is engaged in hemming up, and confining the engaged bone, and perpetuating its diseased state, and her reparative operations only commence and become effective when, either by man's art, or by her own late remorseful ulcerations, this imprisonment at the surface is interfered with, and in a greater or less degree removed.

The highest art then of the surgeon is demanded to counteract and remove her mischievous operations from without, and to hasten, open up, and make way for her all powerful reparative actions from within. I am fully convinced that this interference can be more safely and effectually attempted by the combined action of the knife with cauterization, than by the knife alone, and I commend the treatment to my professional brethren with the greatest confidence, earnestly hoping that they will give it a fair trial, and that it may be attended by the same measure of success in their practice, that it has been it my own.

#### COMMENTS.

### By Louis Bauer, M. D. &c.

The remarks of Mr. Kirkpatrick before the British Medical Association, are well deserving the attention of the profession. Some of his statements are susceptible to repudiation and they should not pass unchallenged; others commend themselves for clinical experiment.

At no previous time was the treatment of joint diseases more clearly settled, and its indications better apprehended than at present.

Rest, in the treatment of joint diseases, is certainly no failure, although alone it may not suffice. If its usefulness is conceded with reference to the "upper" classes, it must be equally beneficial with the lower ones, or be entirely worthless.

If the ex-section of the diseased elbow-joint is, in the estimation of the author, a commendable and legitimate operation, it is equally appropriate in the affection of other joints, or, reprehensible in toto.

The statistics on this operation are not as yet very interesting, but figures occasionally misrepresent and lead to erroneous conclusions.

If ex-section is merely resorted to as the ultima ratio chirurgorum, when the joint disease has existed for a great length of time, the patient confined to his bed for many months, the constitution broken down by continuous suffering, perhaps under the full action of pyaemic poisoning; then the results must be disastrous and appalling. But when on the contrary, the disease of the joint is limited in extent, confined to, or near to the articular surfaces, the health of the patient unbroken; then the results ought to be and are, in fact, satisfactory.

The same proviso holds good with other operations; for instance, in trephining and herniaotomy, procrastination is sure loss; yet no sensible surgeon would allow himself to be governed by statistics that arise from so grave mistakes.

It would seem as if the author himself were an advocate of exsection, though he prefers potassa c. calce, to the saw. Which of the two should be preferred is not difficult to determine. The one removes the dead bone in an instant, and leaves behind healthy structure and action, whilst the other requires a goodly time to accomplish the object, without means of ascertaining whether the therapeutic object is accomplished.

Why Mr. Kirkpatrick should have thrown down and trampled upon legitimate means, in order to place his own suggestion upon a commanding pedestal, is not apparent, for his remedy may well stand on its own merits.

The chief value of Mr. Kirkpatrick's paper, rests in the suggestion to enter the parenchyma of affected bone, and I have no doubt that in this direction, a great benefit may be derived from the judicious employment of the escharotic. I have been in the habit of using for the same purpose, the knife, the trephine and the scoop; and shall with pleasure avail myself of the escharotic for the same therapeutical purpose; perhaps it

answers as well and better than the former. I must, however, warn against the use of the potassa c. calce, in the same promiscuous and unguarded manner in which the author recommends it.

The hyperæmia of cancellated structure is assuredly no indication for the use of escharotics, for it is capable of resolution, without interference with the integrity of the bone. Nor is hyperæmia of the bone, susceptible of diagnosis. Again, I would consider it a most reprehensible practice, to perforate the large trochanter, and the neck of the femur, to get at the presumed seat of hip disease in the cancellated structure of the head; notwithstanding the brilliant result which the author has recorded, in curing an advanced case of morbus coxarius, to the complete exstinction of all consecutive effects upon shape and position of the affected member, in the fabulously short time of fifty days.

This is certainly a surgical miracle, which I should like to see substantiated undisputible evidence.

#### CORRESPONDENCE.

To the Editors of the Canada Medical Journal.

Gentlemen,—In the hope that this paper may invite discussion, and bring out some valuable suggestions on the vexed question of an "Uniform System of granting Licenses" I venture to lay it before the profession.

I know that a difference of opinion exists as to how far a degree in medicine establishes a claim to a license to practice, many of my confreres for whose opinions I have the highest respect, contending that every gentleman, whether he is a graduate in medicine or not, asking for a license, should submit to an examination, and I am quite willing to admit that if the whole profession were of one mind in this matter, it would be the easiest solution of the whole difficulty. There is, however, an old adage that "Doctors differ" and I fear that the profession have already agreed to differ on this particular question.

Where so many weighty considerations are at stake, and where we are all so deeply interested, we must, for the general good, be prepared to make concessions, and I humbly submit that the following may be accepted as the basis of settlement by all the medical schools in the Dominion, without any serious sacrifice of dignity or privilege.

Of this I am certain that it will be worse than useless for us to ask Parliament to prescribe for our ailments, unless we ourselves are unanimous not only in stating the symptoms, but in suggesting a remedy.

I would then recommend the repeal of all existing laws regulating the granting of licenses.

The Incorporation of the Canadian Medical Association, by an act of the General Parliament, with the following powers.

The C. M. A. shall prescribe a course of preliminary education, and no person shall be allowed to enter on the study of medicine until he has obtained the Degree of Bachelor of Arts, or pass an examination before the Medical Council. In either case he must present himself before said Council, obtain their certificate of qualification, and register the same before the General Secretary of the C. M. A. and it shall be lawful for the Medical Council to refuse all recognition of any candidate for a license to practice Physic, Surgery or Midwifery, who has not fulfilled the above requirements.

The C. M. A. shall establish a Curriculum of Medical study, which shall be adopted by all the Universities, or schools of medicine affiliated to Universities, which Curriculum shall be that, say of the University of Edinburgh, and every person must give satisfactory proof of having fulfilled that Curriculum before he can under any circumstances present himself for a license to practice.

The Medical Council of the C. M. A. alone shall have the power to grant licenses to practice Physic, Surgery, or Midwifery, in the Dominion of Canada.

Any person having a Degree or Diploma from any University or College in great Britain or Ireland, shall be entitled to such license without examination as to his qualifications.

Any person having the Degree of Doctor of Medicine from any University in Canada, and who has regularly and faithfully fulfilled the Curriculum of the C. M. A. shall also be entitled to such license, without examination as to his qualification.

Any person who has obtained the Degree of Doctor of Medicine from any University outside Her Majesty's Dominions, but whose course of preliminary study, and Curriculum of Medical education is up to the standard prescribed for Universities in Canada, may also obtain such license, by submitting to an examination before the Medical Council.

And every person who obtains a license to practice Physic, Surgery and Midwifery in the Dominion of Canada, shall immediately cause such license to be registered before the General Secretary of the Canadian Medical Association, and procure a certificate of such registration.

The Medical Council shall be elected every five years, at a general meeting of the C. M. A., taking Quebec as the standard of representation; three shall be chosen from Laval University, three from McGill University, three from the French School of Medicine, and three from each of the old districts of Montreal, Quebec, Three Rivers, and St.

Francis (or two from each of the latter) and the president of the C. M. A. shall always be president of the Medical Council.

For the greater convenience, not only of the Medical Council, but of candidates for admission to the study or practice of the Medical Profession, I would propose that separate meetings of the Council should be held twice a year in each of the provinces of Ontario, Quebec, Nova Scotia, and New Brunswick, for the examination of candidates; and that the Vice President and Secretary of the C. M. A, for the Province in which such meeting should be held, be the President and Secretary of said meeting, without prejudice, however, to the right of members of the Council resident in other Provinces to attend, and take part in the proceedings of such meeting: and thirteen members shall form a quorum at each separate meeting.

The duty of the Medical Council shall be:-

1st. To examine into the qualification of persons entering on the study of medicine.

2nd. To visit at stated intervals the Universities and schools of medicine; and satisfy themselves that the Curriculum is faithfully followed.

3rd. To grant licenses to practice Physic, Surgery and Midwifery, in the Dominion of Canada, in the name of the "Canadian Medical Association."

All certificates of qualification to study, and of Licenses to practice, shall be registered by the General Secretary of the C. M. A., but for the convenience of candidates this may be done through the local secretaries.

With the view of bringing the Medical Profession up to the highest possible standard, I would further suggest that the C. M. A. should have the power of granting a special Degree of Medicine, of a very high order, so high that its fortunate possessor would be as proud of adding its distinctive initial to his name as are the Edinburgh men of signing M. D. E.

This, or the institution of fellowships would do much towards stirring up an honourable spirit of emulation in the profession.

The latter suggestion I think the more feasible in the present stage of our Medical existence.

As a beginning it would be necessary to elect a certain number of Honorary Fellows, say the whole of the first elected Medical Council, and that afterwards the reading of an essay and a written examination before the annual meetings of the Association, should be the only open sesame to its golden portals, unless indeed in the case of some most distinguished man, who might be elected an Honorary Fellow.

After the expiration of the first five years, Fellows only should be eligible for election to the Medical Council, giving Examination Fellows a prior claim to election before the Honorary ones.

I am,
Gentlemen,
Your obedient Servant,
E. D. WORTHINGTON, M. D.

Sherbrooke, October 22nd, 1867.

## REVIEWS AND NOTICES OF BOOKS.

A Biennial Retrospect of Medicine, Surgery, and their allied Sciences.

Edited by Mr. H. Power, Dr. Anstie, Mr. Holmes, Mr. Thomas
Windsor, Dr. Barnes, and Mr. C. Hilton Fagge, for the New Sydenham Society. Philadelphia: Lindsay & Blackiston. 1867. Montreal: Dawson Bros.

This is a volume valuable from the fact that it is a book of reference for all the leading communications that have appeared in the various Medical periodicals of the world during the past two or three years. But though valuable as it certainly is, we think it might have been made still more so, had more of what is practical been inserted, and less of what is theoretical admitted. This is especially the case with the section headed "Report on Practical Medicine" edited by Dr. Ainstie, who, at its close, apologies for the many shortcomings which he is sure will be observed, and which are due to the fact that the work was put into his hands at a very late period, "and owing to a variety of circumstances, over which he had no control, he was unable to make it what he could desire." This is an ample excuse for Dr. Ainstie, but we think the New Sydenham Society are much to blame for allowing such an important section of their Biennial Retrospect to be given so late into the hands of the person they intended should edit it, as not to give him sufficient time in which to do justice either to himself or the subject. We have also been particularly struck with the very few lines (only two pages and a half) which are devoted to the subject of skin diseases. We know of no department of Practical Medicine, which during the last few years has received greater attention, than has that of Cutaneous diseases, and we confess to disappointment at its somewhat meagre show. This chapter decidedly does not do Dr. Ainstie justice, for no one who has read his well known work on "Stimulants and Narcotics" but must have been struck with the abilities of the author-not only as a writer but as a man of extensive reading and research. Notwithstanding its imperfections, this chapter contains several very valuable abstracts of papers, among them one on Cholera—which takes up and discusses three of the most important points connected with the disease, viz: (1.) The contributions to the settlement of the dispute as to the prevalence or non-prevalence of premonotory diarrhœa. (2.) Opinions as to its pathology; and (3.) The most important suggestion as to the treatment. We have not space to analyse this brief paper, but it is decidedly a valuable one, as is also the one on Cerebro-spinal Meningitis.

The Report on Surgery is contributed by Mr. T. Holmes, and seems a very good resumé of the contributions and inventions to this department of Medicine during the past two years; the first shows the steady progress that acupressure is making, especially among Scotch Surgeons. There is also a lengthy and exceedingly valuable article on Endoscopy referring more particularly to Desormeaux's work—the article by Cruise in the Dublin Quarterly of May, 1865-one by Teale in the Lancet 1866 (where 6 cases of stone were examined and the stone seen in every case) and the pamphlet issued by Heath of London. This is a subject yet in its infancy, yet from personal experience in the use of the instrument during the last nine months, we are fully convinced that whatever doubts there may be with regard to its use in diseases of the bladder, -and Heath does not seem to have had much success in its employment in examination of the bladder, there can be none as to its use in the gleet, and other affections of the urethra, In the section of Fractures of the Larynx we are pleased to notice that reference is made to Dr. McLean's case, and credit given to this Journal, where it was first published. Under the head of Aneurism also, we find the case of the late Dr. Sewell of Ottawa, of Aneurism of the Carotid cured by starvation, rest, and Iodide of Potassium, quoted at length, credited to our Journal. This fact we particularly notice for the benefit of some Medical men in Canada who fancy their contributions would never be read out of the Dominion if published in the Canada Medical Journal, and steadily send their communications either to the British or United States periodicals. The other departments we have only had time to glance at, but the selections seem to be practical. A book of the description of the retrospect is certainly difficult of compilation-hard to decide what to put in and what to leave out: while, then, we consider the book a valuable one and worthy a place in the library of every Medical man -we cannot help saying that we hope in future the Sydenham Society will give its editors ample time to arrange their departments-thus doing themselves and the Society who employs them, justice,

Chemistry. By William Thomas Brande, D.C.L., F.R.S.L. & E. of Her Majesty's Mint, Honorary Professor of Chemistry in the Royal Institution of Great Britain; and Alfred Swaine Taylor, M.D., F. R.S., Fellow of the College of Physicians, London, Professor of Chemistry and Medical Jurisprudence in Guy's Hospital. Second American edition thoroughly revised. Philadelphia: Henry C. Lea. 1867. Montreal: Dawson Bros.

This is an elegant volume of nearly eight hundred pages, and as a manual for students seems all that could be desired. It is full without being lengthy, minute without being wearisome, and written in a manner calculated to attract. To accomplish this object the authors have avoided as much as possible the introduction of questions connected with abstract science or with chemical Philosophy. They have also excluded from their pages, the formulæ and descriptions of substances which are never likely to be seen, except as rare and curious specimens in the Cabinet of Professors. We cordially agree with Dr. Taylor when he says, "The chemistry of every day life is quite sufficient to give full occupation to a Medical student. If after the completion of his Medical education he has the time and the inclination to devote to the study of atoms and the numerous and conflicting hypotheses on their combinations in groups and series, there can be no objections to his taking up the examination of these re-condite subjects, but let him make himself master of what is simple and practical, before he occupies valuable time in study ing that which is complex and hypothetical."

The ordinary and well known notation, based on the equivalent or combining weight of bodies, is adhered to in this edition, because although not perfect, it is based upon simple and intelligible principles.

Dr. Taylor remarks, "that the new method of notation must be regarded as still upon its trial \* \* \*. It will be found that the best modern works on Chemistry in the English and French language, the old notation is adopted and the new notation ignored even by writers who have been advocates for a change\* \* \*. Nothing is to be gained by laying aside one system because it is imperfect, for another which at present offers no prospect of stability." The revision of this edition, owing to the death of Professor Brande on the 11th February 1866, has devolved entirely upon Dr. Taylor, who states that every page has undergone careful examination, and numerous additions have been made to various portions of the volume. Our somewhat hurried examination warrants us, however, in saying it is a first class book for students, and as such we confidently reccommend it to them. Those who may desire to purchase it may be sure of having in it all the latest chemical knowledge, for Dr.

Taylor's preface is dated the 29th of June of this year. The volume does credit to the publishing house of Henry C. Lea.

### PERISCOPIC DEPARTMENT.

# Surgery.

#### THE OPERATION OF EXCISION OF THE CLITORIS

Mr. Baker Brown's operation-for we believe the senior surgeon of the London Surgical Home has no rival claimant for the questional honor of recommending the exision of the clitoris for the cure of hysteria, epilepsy and insanity—has been very properly made the subject of discussion by the Obstetrical Society. It is perhaps a pity that in a question of this kind, which has so many relations to professional ethics as well as to medical science, the Society could not express an authoritative collective opinion on its merits. It is true that the accumulated individual opinions emphatically expressed in condemnation of the rationale of the operation. and of the principles which appear to have guided the chief operator in his performance of it, by those who spoke, make up a quasi-collective decision that must have great weight. But behind the prominent speakers at a great meeting of a learned Society there is always a large body of men of mature experience, of calm and sagacious judgment, alike free from the fervour of partisanship and proof against the arts of rhetoric The voice of such a body deliberately given upon the simple question at issue, bared of all complicating and irrelevant incumbrances, would be the best representation of the voice of the professions at large.

But there is another arena for the discussion of this question, which possesses some advantages over a scientific Society. After all, appeal must be made to the whole body of the profession, and that can only be done through the press. The ease is now brought to this bar. We cannot shrink from the duty, however repulsive it be, of examining it.

First, then, what is the operation? Secondly, what good is it calculated to effect? The operation has been likened by some to circumcision in the male, but it is more correctly described by Dr. Tyler Smith as analogous to amputation of the penis. Certainly Mr. Brown snips away not only the praputium clitoridis, but also the greater part if not the whole of the clitoris itself; and every one must admit that the clitoris is the anatomical homologue of the penis. This is what Mr. Brown, with the pardonable pride of an inventor, means when he speaks of "my operation"—his latest if not his greatest discovery. Now the clitoris is undoubt-

edly a principal organ in the large system of erectile and excitable structures in the female. But there are others of scarcely inferior importance; and all are intimately associated to form one whole. The same vascular branches which supply the erectile clitoris supply the other erectile structures adjacent to the ovary, and those which surround the vulva: the pudic nerve, to whose clitoric branches such frightful powers are attributed, also distributes branches to all the other erectile structures of the vulva and vagina. But, contends Mr. Brown-or if he does not so contend then his operation has no meaning—the clitoris is the chief source of peripheral pudic irritation, which, acting on the nervous centres, produces a fearful train of ills, which he thus enumerates:-"1. Hysteria. 2. Spinal irritation, Amaurosis, Hemiphlegia, etc. 3. Epileptoid fits. 4. Cataleptic fits. 5. Epileptic fits. 6. Idiocy. 7 Mania. 8. Death." Certainly if this be the true sequence of events, the culmination for which "peripheral irritation of the pudic nerve," or "dilection," as Mr. Brown, in barbarous jargon, otherwise calls it, is held responsible, then nature was wrong in supplying a clitoris, and the operator of the Surgical Home is right in correcting nature. But where and how, it will be asked by those deservedly eminent for their knowledge of nervous diseases, has Mr. Brown studied and made this notable discovery? We have lately seen a laudatory paragraph in The Times, in which the surgeon of the London Surgical Home is described as having successfully brought insanity within the scope of surgical treatment. Have the physicians of the great lunatic asylums at home and abroad—many of whom are justly celebrated for their profound knowledge of the anatomy, physiology, and diseases of the nervous system, whose lives have been passed in the close observation of men and women suffering from every kind and degree of nervous disease -recognized this sequence? If they have, or shall do, of course they will invite M. Brown to make a tour of asylum-deliverance; to hold a grand assize of clitoridectemy. But Mr. Brown does not, so far as we know, cite the evidence of those who are most intimately acquainted with nervous diseases in his favour. He does, indeed, dedicate his book to Brown-Séquard. Does Brown-Séquard endorse Baker Brown? If so, then this repulsive doctrine will be invested with a title to professional respect which it does not as yet possess. Mr. Brown is not, however, so arrogant as to disdain all corroborative testimony. He therefore feels "gratification in being able to name the following gentlemen who have been led to adopt my views and treatment in proper cases: -Sir James Simpson; Beattie, (sic), of Dublin; Sir John Fife and Dr. Dawson, of Newcastleon-Tyne; Dr. Duke, late of Chichester; Dr. Shettle, of Shaftsburry; John Harrison, Esq., of Chester; Drs. Savage, Routh, and Rogers, in

London; my eldest son, Mr. Boyer Brown, now practising in New South Wales; with mý colleagues in the London Surgical Home, Dr. Barratt, and Messrs. Harper, Chambers, I. B. Brown, jr., and Bantock and very many others."

No doubt these gentlemen will feel it incumbent upon them to relate their own experience and conclusions. Indeed, they stand, cited as they are, in the light of compulsory witnesses,; they cannot, without being liable to misconstruction, maintain silence. Drs. Routh and Rogers have already given their evidence in the discussion at the Obstetrical Society. (See The Lancet, February number, p. 119.) Our readers will judge of its value for or against. Still, giving the full measure of weight justly attaching to the names of the gentlemen cited by Mr. Brown, we look for the opinion of others who have had more enlarged opportunities of studying the pathology of nervous diseases. This question of the causation of epilepsy and insanity is of infinitely greater variety and difficulty than Mr. Brown supposes. It is not to be solved by excising the clitoris. It is simply monstrous and contrary to experience to affirm that these diseases are due in any considerable number of instances to unnatural excitation of the pudic nerve. We concur with Dr. West when he says in his admirable letters (see The Lancet, February and April number,) that " he has not seen any instances in which hysteria, epilepsy, or insanity in women was due to masturbation as its efficient cause." And Dr. Barnes, in his place as President of the Obstetrical Society, declared his conviction that, in the majority of cases of epileptics and insane persons in whom this vicious practice existed, it was resorted to after the disease had lasted some time, when the mind had become degraded, and when, being in seclusion, the sexual passion could not be normally gratified.

Has the operation, as a preventive or cure for epilepsy and insanity, a philosophical basis? Certainly this, the first postulate, has not been proved. Can we, accustomed to the rational method of studying medicine, approve the downright empirical method upon which this operation is advocated?

Few physicians will be found to ascribe such dire results to the clitoris. The sources of excitation of the sexual organs are numerous. The periodical congestion of the ovaries occurs independently of the clitoris; the mind alone is sufficient; many accidental conditions of the body produce determinations of blood to the sexual organs, which produce the same result; many diseases of the uterus, vagina, and rectum do the same. The prudent physician endeavours to remove or to modify these causes; he does not unnecessarily talk of, or suggest masturbation.

The matter has gone such lengths that it has challenged serious attention, and may possibly call for some decided demonstration on the part of the profession. The question is no longer one simply of the medical or philosophical merits of the operation. It is now surrounded with the most vital questions of moral and professional ethics. We will state one of these, carefully confining ourselves to the published statements of Mr. Brown himself, or of others who accept the responsibility of their allegations. Dr. West says and deliberately repeats (and he is confirmed by Mr. Paget): "I know that this is by no means a solitary instance of the removal of the clitoris by Mr. Brown without the consent, without the knowledge, of the patient." Who will not concur with Dr. West when he says that "the removal of the clitoris without the cognizance of the patient and her friends, without full explanation of the nature of the proceeding, and without the concurrence of some other practitioner selected by the patient or her friends, is in the highest degree improper, and calls for the strongest reprobation?"

This, the moral aspect of the question cannot be evaded. We cannot now pursue it in all its bearings. These deeply concern the honor and public credit of the profession, and must be anxiously examined. Not only is Mr. Brown's operation new, but his views of medical ethics are also new. Are we prepared for a revolution in those principles which for public good, have governed medical men in the practice of their profession since the days of Hippocrates?—London Lancet.

## CLINIC OF PROF. GROSS.—MR. T. SPENCER WELLS OF LONDON.

## Diagnosis of Ovarian Tumours.

Prof. Gross, at the opening of the clinic, introduced to the class Mr. T. Spencer Wells, of London, the distinguished surgeon and ovariotomist, Dr. John L. Atlee, of Lancaster, Pennsylvania, Dr. Washington L. Atlee, of this city, and Dr. Nicoleysen, of Norway. He took occasion to pay a flattering tribute to English surgeons, physicians, and obstetricians, to whom medical science and art have been so largely indebted. From the time of Harvey, Sydenham, and Richardson Wiseman, to the present, England has produced many distinguished medical writers, and practitioners, making it a matter of thankfulness with us that we read and speak the language in which they wrote.

The operation of ovariotomy, which Mr. Spencer Wells has performed upward of two hundred times, and with such marked success, is, however, Prof. Gross stated he was proud to say, of American origin. It was first performed by Ephraim McDowell, of Kentucky, in 1809, the

patient surviving thirty-two years. He operated about thirteen times in all. The first double operation was executed by Dr. John L. Atlee, in 1843, the case terminating successfully. Dr. Washington L. Atlee has performed the operation of ovariotomy more frequently than any other American—upward of one hundred and sixty times—the last having been completed only an hour ago.

Dr. Gross after indulging in some further comments in which he paid a high compliment to the moral status of the British profession, stated that he had a case of ablonimal tumour which he should bring before the class, in order to afford Mr. Wells an opportunity of making some remarks upon the diagnosis and treatment of ovarian diseases. The subject, he added, was now attracting general attention, and he had no doubt they would be deeply interested in what his eminent confrére would say. At the close of Mr. Wells' lecture, Dr. Gross said, "If I were writing my autobiography, I should entitle one of the chapters, 'An Hour with the Ovariotomist.'"

A coloured woman was then brought into the amphitheatre, and Mr. Wells was told that she was a widow, forty-nine years of age, who had two children before her husband's death, twolve years ago.

Mr. Wells then said:

"Gentlemen.—In examining a patient, I am always in the habit of seeing what I can without asking any questions; and the first thing I notice in this patient is her colour. I have never seen a case of ovarian disease in a black woman, which is not surprising, as there are very few colored persons in England. I have operated on a creole lady from New Orleans and on a mulatto from Jamaica. Dr. Atlee tells us that, while ovarian disease appears to be rare among coloured people, fibroid tumours of the uterus are excedingly common.

"The first quetsion, then, to decide is, whether the tumour in this woman is ovarian, or fibroid tumour of the uterus. And I lose here one aid which I should have in a white woman. In our race, a florid complexion is very common in patients suffering from fibroid tumour of the uterus, while a certain amount of pallor—or a chloro-anæmic aspect—is the ordinary accompaniment of ovarian disease. When a woman with a large abdomen comes into my consulting room, it is not uncommon for me to form a diagnosis in my own mind, from the colour of her face. I cannot pretend to judge in any such way here, but this patient has a tolerably healthy look, she is not emaciated, and there is no swelling of the legs. Carrying on the examination, we assist the eye by measurement, and I usually take various measurements of the abdomen; one, circular, at the level of the umbilicus, one from the ensiform cartil-

age to the umbilicus, and one from the umbilicus to the symphysis pubis—thus observing whether the greatest increase of size is above or below the umbilicus—and then another, from the anterior superior spinous process of the ilium, on each side, to the umbilicus. If the distance from the right anterior superior spinous process of the ilium to the umbilicus, is greater than that from the left to the same point, it is probable that the right ovary is affected rather than the left, and vice versâ, although there are frequent exceptions to this rule.

"The abdomen should next be examined with reference to the presence of fluctuation. In this case, my impression is, that there is a fluid in the abdominal cavity, surrounding a solid or semi-solid tumour. If it were within a cyst, it would be less distinctly perceptible than it is. You see it distinctly on the very slightest impulse.

"The outline of the tumour should then be ascertained. A hard distinct outline is in this instance readily perceived, extending from six or eight inches above the umbilious, almost to the pubis. The tumour can be pushed about, and seen to move underneath the abdominal wall, and the hand can be introduced below it on each side. It does not make any traction on the umbilious as it is moved, which is a pretty sure sign that there is no close attachment to the abdominal walls.

"On feeling the surface of the tumour, it is found to be hard and solid with outgrowths or projections over it, like marbles or walnuts, some of them a little movable, with deep sulci between them. This inodulated irregular surface of a hard solid tumour is exceedingly common in fibroid enlargement of the uterus, but very uncommon in ovarian tumour. It is very unusual to find an ovarian cyst so large as this one is, without distinct fluctuation in some part of it. None can be made out in this instance; nothing but a hard, movable, solid tumor, surrounded with fluid, free in the peritoneal cavity. I have scarcely a doubt that this case is one of fibroid tumour of the uterus, and not one of ovarian disease. Auscultation is of value in settling this question. I have only once or twice heard a vascular murmur in an ovarian tumour, but in fibroid tumour of the uterus a vascular murmur is often perceptible; sometimes tubular, as if from large vessels, sometimes more vesicular, as if from a great number of small vessels.

"The stethoscope, in this case, placed in the iliac region, does not detect any murmur, but an arterial impulse, projected, as it were, from the aorta through the solid substance of the tumour. From the almost inaudible character of the murmur, one would say that the tumour is not very vascular, but rather an outgrowth, than an enlargement of the whole of the body of the uterus itself.

"All the information possible should be obtained from the abdominal wall, but an internal examination very much clears up any doubt as to the diagnosis in these cases. In this patient the vaginal examination quite bears out the diagnosis made through the abdomen, inasmuch as the uterus is drawn up out of reach. This often happens in enlargements of the uterus, while it is very rare in an ovarian tumour, that the cervix uteri cannot be felt, unless the ovarian tumour is detected low down in the pelvis. If the pelvis be empty, and the uterus out of reach of an ordinary examination, as in this case, that fact is almost of itself sufficient to remove any doubt as to the diagnosis. The sound introduced into the cavity of the uterus, to see if it it be elongated, is often of service in determining the nature of the enlargement. Frequently, however, although the womb is elongated, the cavity is so twisted and bent, that the sound cannot be introduced up to the fundus, and mistakes are often made in this way. If the sound can be passed up eight, ten, or twelve inches, of course, it clears up the case completely; but as a rule, I do not place much reliance upon the opposite condition, when the sound will not penetrate far, because the uterus may be large, and its cavity small or distorted."

The patient having been taken away, Mr. WELLS added:

"I have removed these large fibroid tumours of the uterus but with very ill success. In one instance, one which weighed twenty-six pounds, the patient lived four days, both ovaries were removed with it, and from this and other cases which I have published, I have been led to the opinion that unless there is some very serious danger to life from the hæmorrhage, or pressure on some vital organ, these large fibroid tumours of the uterus are better left alone until there is some very urgent necessity for interference."

Mr. Wells then showed several instruments which he used in ovariotomy, and made remarks on different modes of dealing with the pedicle, he then said:

"As to the results which I have had in ovariotomy. I have operated in two hundred and twenty-eight (228) cases. In the first one hundred patients, sixty-six (66) recovered; thirty-four (34) died; in the second hundred, seventy-two (72) recovered, and twenty-eight (28) died; and in the twenty-eight cases of the third hundred, four died and twenty-four recovered. Out of the two hundred and twenty eight cases one hundred and sixty-two (162) recovered and sixty-sixty (66) giving mortality of 29 per cent. This is a mortality better than in many serious surgical operations, which no one can think of calling unjustifiable; better than in amputation at the hip-joint of the thigh; than in the operation for stran-

gulated hernia; than ligature of the iliac artery, etc. All these surgical operations which are preformed without hesitation, give results less favourable than have been obtained in ovariotomy, even when both favourable and unfavourable cases have been included For this operation is often preformed when there can be but little chance of recovery, in the last days of life, at the solicitation of the patient that she may not die without some effort having been made to save her. The results would be much more favourable if one could decline to operate on any but favourable cases. In a certain number of cases one begins the operation but is unable to complete it. This occurred to me eighteen times. In seven cases I removed both ovaries, having found after removing one ovary that the other was diseased; four of these patients recovered and three died. Twice I have removed an enlarged ovary after the removal of the other, some time before. In one case another surgeon extirpated tho left ovary some nine months before I did the right, which began to enlarge soon after the first operation. The patient died. In another case I operated upon a putient who remained perfectly well for a year, when the other ovary began to enlarge, I removed it eighteen months after the first operation. The patient recovered, and remains well, as I said just now. In eight or nine per cent. of my operations I have begun the operation, and not been able to complete, or have found that I had made an error in diagnosis. I do not think this a much larger proportions of failures or mistakes than may be expected in other serious surgical operations. Mistakes will occur sometimes in spite of the greatest possible care. The surgeon preforms lithotomy, and possibly finds there is no stone; or he may puncture some collection of fluid and find it is an aneurism. These errors are gradually being eliminated as one advances in the knowledge of the disease. In ovariotomy we have not the literature or the traditions of centuries to guide us as in the better known operations, but Dr. Atlee following Dr. McDowell and other American surgeons, and we in England have to find our way along new untrodden paths. But with all these difficulties and disadvantages, I believe that in a few years, if we faithfully make known our errors and show others the way by which we learn to avoid them, the operation of ovariotomy will be performed hereafter, by many of you gentlemen, with far greater success that it has been by us."

At the close of his Mr. Wells lecture exhibited some instruments,—a trocar and a clamp,—of his own invention, for the purpose of facilitating the operation of ovariotomy; but as an account of these has already appeared in print, it is not deemed necessary here to describe them.

#### CASE OF ACUTE IDIOPATHIC GLOSSITIS.

By JAMES B. BURNET, M. D., House Physician, Bellevue Hospital, New York

Timothy Harley, aged thirty-five years, single, a native of Ireland, and an iron moulder by occupation, was admitted to Ward 8, of Bellevue Hospital, on Aug. 30th, 1867. Of himself he gave the following history ; Father died of old age, and mother of consumption. One brother died of a diarrhœa, and one sister in childbirth. Has now one sister, fortyfive years of age, married, healthy, and has seven or eight children. There is no known hereditary predisposition to disease in the family. He has never been sick in his life until this present illness. Never had any form of venereal disease. Two months ago a lump appeared on the left side of his throat, which soon disappeared, and then, shortly-after, appeared again, and so on for two or three times, until one week ago on Tuesday, when he noticed that the lump was a little larger that ever before, slightly sensitive, and his throat was so sore that he could scarcely swallow; but he did not notice anything wrong about his tongue at this time. The same day he attended a picnic, drank three or four glasses of lager beer, and returned home about 11, P. M. Did not notice that his throat was sore, or his tongue painful, when he went to bed. That night he slept in a draft between two windows. Does not remember whether it rained or was particularly damp that night, or not. When he arose, at six o'clock the next morning, he noticed that his tongue was greatly swollen, hot, and painful and his throat sore, so that he could scarcely articulate or swallow. There was a profuse salivary discharge throughout the day. His tongue continued swelling so, that by afternoon, it almost completely filled the cavity of the mouth and greatly impeded respiration. The pain in it was intense. He was feverish, anxious, and restless. The treatment adopted by the physicians called in to see the case, gave no relief. On Friday' when admitted, he presented the following symptoms; Tongue immensely swollen and hard; immoderate action of salivary glands; glands beneath angles of jaw on either side enlarged and indurated; slight foctor of breath; pulse normal in character and frequency; skin cool; no constitutional symptoms. Bowels regular, and urine found to be normal, after chemical and microscopical examination. Heart and lungs healthy; liver and spleen normal in size.

The diagnosis made was acute idiopathic glossitis, and the treatment instituted was free gargles of chlorate of potassa the application of ice to the tongue, and saline purgatives. His diet consisted of mik and beeftea.

Sunday. Sept. 1st. Swelling diminishing. The disease seems confined almost exclusively to the left side of the tongue.

Monday, Sept. 2d. Much better. Tongue greatly diminished in size. Salivary discharge less, ordered potassii iodidi, 10 grains, three times a day.

Friday, Sept 6th. Doing well. The swelling is now confined to the left side of the tongue. On examination of the throat, an extensive chronic pharyngitis was detected. Tongue feels slightly heavy yet.

Sunday, Sept. 8th. Swelling almost entirely subsided. No difficulty in deglutition. Good appetite. Feels very well.

Monday, Sept. 9th. Discharged well.

Remarks. This case is particularly interesting, because of its rarity, acute idiopathic glossitis being a disease but seldom encountered. Glossi tis generally results from the too free use of mercury, or from acrid substances taken into the mouth, or it may occur in the course of scarlet and typhus fever, and small-pox. It but rarely leads to the formation of an abscess. Occasionally the swelling is so great as to threaten suffocation, in which case tracheotomy or laryngotomy must be performed. In a patient of Mr. Benjamin Bell, life was saved under similar circumstances by this operation. Dr. Graves mentions a case in which the inflammation merely affected one half of the tongue. The treatment consists in active cathartics, applications of ice, gargles of chlorate of potassa, and, if necessary, free incisions to relieve congestion, or to discharge the pus if suppuration has taken place.

Some recommend pencilling the organ with nitrate of silver, while in Dr. Graves' case, leeches were applied directly to the tongue.

#### INGROWING TOE NAIL.

Dr. Bailey in the Leavenworth Medical Journal, suggests the following method of healing this annoying deformity:

"I have found that the second toe always presses firmly against, and rather beneath the side of the great toe, which very naturally produces the whole trouble. It has occurred to me, therefore, that if this constant cause could be dispensed with, and at the same time pressure applied in such a manner as to press the flesh away from the nail, a permanent cure could be effected without the use of the knife, which is justly dreaded by the patient. To accomplish this, I got up a bandage, by taking a a piece of strong muslin about one inch wide, and just long enough to make two loops (by sewing) one large enough to slip over the great toe, and the other to slip over the third toe and bring them close together, letting the second toe rest over or above the bandage, where it furnishes

precisely the required pressure to crowd the soft parts away from the nail and at the same time remove the pressure that caused the disease.

"In the few cases that I have used this simple appliance, it has been followed by complete success. It is convenient, not troublesome to apply, and can be worn without dispensing with ordinarily tight boots or shoes, which is sometimes, quite an important thing, especially if the patient is a lady."

#### REPRODUCTION OF BONE.

Much has of late years been said of the power of periosteum to restore great waste of bone. We find in a recent number of the Boston Medical and Surgical Journal a case reported by Dr. Henry J. Bigelow which is so instructive that we make space for a brief abstract.

A light-haired, unhealthy looking man, of a scrofulous family, injured his elbow which swelled and gave him great pain. Such swelling and pain always accompanied all subsequent injuries of the same joint, for five years. Towards the close of that period, fistulous openings made their appearance, communicating from one side of the limb to the other, and discharging a thin sanious liquid. The incision revealed in the hus merus a cavity, the size of an almond, lined with caries. Three months afterwards, the formation of abcesses having continued, the joint was opened. The ends of all three bones were much diseased, and the head of the radius, together with about an inch of the ulna and the same amount of the humerus, was excised. The periosteum, being firmly attached to the coral-like surface of the bones, was torn out from these inequalities, and the wound was closed, the periosteum being allowed to remain within. The constitutional irritation still continuing, five months after the excision, the arm was amputated. About a year following the amputation, the man died of pulmonary consumption.

Upon dissection of the amputated arm, it was found that both the condyles of the humerus, as well as the process for the attachment of the flexors and extensors had been reproduced by the periosteum.

#### THE AIR TREATMENT.

M. Boisson has introduced a method of treating superficial wounds by a jet of air from the common bellows, immediately forming a dried film over the exposed fiesh, beneath which healing is greatly facilitated and other obvious advantages secured. Burns which have removed the skin may be treated advantageously in this way.

#### ON KNOCK-KNEE.

A CLINICAL LECTURE DELIVERED AT THE NATIONAL ORTHOPÆDIC HOSPITAL.

BY DR. HENRY DICK.

GENTLEMEN,—I select this case for a lecture because there are some interesting points in it, which are important not only in the treatment of knock-knee, but also in the treatment of other deformities—I mean the cutting of tendons, and respecting which presently I shall explain myself more fully.

Several deformities may effect the knee joint. They may effect one or both legs. Those most frequently met with are the contracted knee and knock-knee. You have seen one case of contracted knee in our wards under treatment, and at another time I shall give you more full information about it. The third form of deformity of the knee-joint is the outward curvature of the leg, and this deformity, like knock-knee, is generally of rickety origin. The most unfrequent deformity of the knee is the contraction forwards. I know only two cases on record. One of Dr. T. E. Grant, of Canada, which was of a traumatic origin; the other related by my friend, Mr. W. Adams, of which the original is in the Museum of St. Thomas's Hospital. The pathological anatomy is identical in both cases, but the history is wanting in that of the museum.

In the case before us now, I show you here the casts of the deformity of both legs previous to the cure. You see the deformity was more severe in the right knee than in the left.

The history of the case is the following: -

H. P., 15 years of age, a peasant boy, never before ill, came to the hospital December 15, 1865, recommended by our esteemed consulting Physician, Dr. H. G. de Mussy. There were no signs that he had rickets in his life. He stated that twelve months before entering the hospital his knees began to be painful after walking or working, and they got worse up to the time of his coming into the hospital. He was treated with two long splints, well padded, for about three months. One deformed leg got better, but in the right leg, as soon as the splint was taken off, the deformity re-appeared. The tendon of the right biceps femoris and also the fascia were divided on the 20th March, the splints re-applied, and in three weeks the deformity had completely disappeared. He will leave the hospital completely cured, but of sourse wearing irons for some time to prevent relapse.

Now, gentlemen, coming to the denomination of this deformity, I do not think the term "genu valgum" a good one, and really I consider the English denomination of knock-knee is a better definition. But in all the books on deformities it is called so, and we must keep the name "genu

vulgum," as we have kept the name of "pes varus" for club foot. In science we have to do as in many other things, take them as we find them, and do the best with them. If we were to change the names of diseases to to make them logical, I think much confusion would ensue, and I do hope in future when a new affection or an unknown disease may be described, a logical name will be given, so that the name will at once be a correct signification.

The father of orthopædic surgery in this country, Dr. Little, tells us in his valuable book on "Deformities," that rickets are the principal cause of knock-knee, but states that debility may produce the deformity. I think Dr. Little is quite correct, and in the case before us believe debility was the cause. But I remember a case in my own practice, where knock-knee had a traumatic origin in a severe burn on the outside of the knee. I had in that case not only to cut the biceps, but also to perform a plastic operation to remove the cicatrices. In the case in point, the deformity was produced not only by the shortened tendons, but also by the skin and fascia.

In dissecting a "genu valgum" in the early stage of the deformity, we generally find the surfaces of the tibia and the femur very little changed. Real changes have only taken place in the soft parts. The ligaments, fascia, and muscles are shorter on the contracted side, and lengthened on the opposite. But in old cases the articular surfaces of the tibia and femur become changed by a partial absorption of the part where the pressure is most severe in the knee-joint. The rotatory movement of the knee in walking made me at one time think it was due to the deficiency of one part of the articular surfaces, but my researches on the rotation of the deformed spine revealed to me the law under which that rotatary movement takes place. The reason of this rotatary movement is owing to the unyielding and unelastic state of the biceps, fascia, and ligaments, forming a kind of string of a bow, and not being capable of being extended, the knee rotates with inward movement in walking.

I think in no deformity can we give a better prognosis than in knock-knee. I do not remember one case which has not been cured when proper treatment has been applied. You may see a number of people with knock-knee, walking about not cured, but you may be sure had they been properly treated, they would have been cured. Knock-knee is generally not congenital. I cannot find any congenital case recorded, answering completely to knock-knee, as we see it when it occurs from rickets or debility. Mr. Depaul describes a case of rickets having taken place in the intra-uterine period, and so do some German writers, but I doubt, if knock-knee can take place in footal life, and my reason for it is because

I believe knock-knee is the result not only of the rickety and debilitated state of the knee, but also of certain mechanical laws, which are not incidental to fœtai life. When rickets is the cause of knock-knee we often find a disposition to valgus in the foot, which we do not always encounter when debility is the cause of the deformity; as an illustration is the case mentioned above; in it there was no tendency to valgus. Previously in this lecture I gave you a description of the deformity, and I told you already, as you see by the casts, that the right knee was more deformed than the left. A well padded splint was applied with the patient of course in the horizontal position.

You have no doubt heard or read something of the cutting and noncutting of tendons in the treatment of deformities. Make it always a principle in practice to try a thing (of course if there is no danger in doing so); so I tried the non-cutting method for three months. There was a little improvement in both knees, but the deformity in the right knee was still persisting. I dare say in a very considerable length of time I should have cured the patient. As the non-cutting method did not seem very beneficial, I decided to cut the biceps and fascia in the right leg. You see the result. Only three weeks after the operation was performed the deformity in the right leg had completely disappeared. You see the leg upon which the operation has been performed presents a much more normal shape than the other, upon which no operation was performed. I was always of opinion that the subcutaneous cutting of tendons is a very harmless operation; of course if practised where not indicated, and in the wrong place, it will do harm. But the same may be said of all remedies and operative proceedings. Wherever there is an idiopathic shortening of soft parts, and no cause any longer existing in the nervous centres, I think subcutaneous section is of very great advantage. In fact all our improvements in the treatment of deformities must be ascribed to it. Our forefathers tried to cure deformities by buckling, strapping, and straightening, but very little improvement was made in the right direction. Before tenatomy became popular there were numbers of orthopædic institutions to be found everywhere, but the result of their treatment was not satisfactory until subcutaneous section was tried.

In conclusion, I must impress on your minds that it is not by cutting tendons and fascias you have overcome the deformity; the truth is, in cutting a part of the tissues producing deformity, you are more able to attack the other elements causing the affection with success. Tendons, fasciæ, and ligaments combined, are too strong to be overcome, but weaken some of the elements of deformity by cutting, then you are able to overcome the other difficulties. In fact it is "l'attre Pennemi en detail."

#### TETANUS NEVER OF CENTRIC ORIGIN.

It is doubted if tetanus ever arises from injury of the spinal cord The Richmond Medical Journal states, that of 56,775 cases of gun-shot wounds recorded by Confederate surgeons during the war, no case of the kind occurred. Dr. Ashhurst, of Philadelphia, in an analysis of nearly four hundred cases of injury of the spine in the Union army, had the same experience. But one case of tetanus occurred among them, and in this the autopsy shewed a contusion of the anterior crural nerve, in addition to an injury of the third lumbar vertebra.

# Medicine.

#### ON NIGHTMARE OF CHILDREN.

By Sydney Ringer, M. D., Professor of Materia Medica and Therapeutics at University College; Physician to University College Hospital, Assistant to the Hospital for Sick Children, Great Ormond street.

#### SCREAMING OF CHILDREN.

Violent screaming, which cannot be quieted, and which may last for a few minutes to several hours, is frequently witnessed in children. This is generally produced by one of three causes—hunger, pain, or nightmare. These remarks treat of screaming from the last cause.

The following account gives a fair example of a case of this kind:

Charles L., 2 years old, came under my care at the outpatient department of the Children's Hospital. The child was badly nourished, and was afflicted with a frequent hacking cough, that troubled him much more at night than day. For two months he had, twice or three times each night, started from his sleep, screaming violently. Each paroxysm of screaming lasted about half an hour. Sometimes he rolled about the bed, threw his arms wildly about, and knocked his head violently against the bed; on other occasions he sat up in the bed and screamed so violently that he became black in the face. While thus afflicted his eyes rolled and he appeared to be quite unconscious, as he did not recognize his mother, and could not be brought to by her care and attention. His mother stated he did not appear to have his senses. He gave no signs of being in pain. He did not talk, he only screamed violently. After each paroxysm he fell asleep but his sleep, was disturbed, an his eyes still rolled, and he frequently meaned. His gums were neither red nor swollen. His appetite was good, but his bowels had been relaxed for three weeks, and his motions were green and slimy, but no worms were ever seen in them. He was fed judiciously. He wetted the bed at night. During the fortnight that preceded his application for relief at the Hospital, he had suffered from two convulsive fits, when his arms worked and his face twitched. Each of these fits lasted twenty minutes.

This case may be excepted as a very fair example of the screaming of which we are now speaking.

Such screaming may occur in children of all ages; but, while it is met with in children of 10 or 12 years of age, it is of more common occurrence in those of a few months to 2 or 3 years old.

These attacks may last a very variable time, for though the paroxysm may pass away in a few minutes, it sometimes continues for half an hour to one or even two hours. During this time the screaming is violent and continuous. Sometimes the children appear to be asleep throughout the paroxysm, while other children wake from their sleeep, but continue to scream with unabated violence; but even when awake they often appear to be unconscious of what occurs around them.—They seem to be, as their mothers state, "out of their senses;" thus they for the most part cannot be quieted. Others appear to wake thoroughly, and are then terribly frightened, and often tremble all over. Such children can generally be quieted in a short time by kindness and attention paid to them, but they remain for some time much agitated, and refuse to be left alone, or, if removed from their bed, they are afraid to return to it. Some children cry only a little, but they wake up frightened and trembling.

Such screaming may continue to occur for months and even years, sometimes disappearing for a time, and then, from various causes to be immediately mentioned, it returns again. It is often repeated several times each night for several months.

Such attacks are naturally a source of much annoyance and much anxiety to the parents, and thus medical men are not unfrequently consulted for this affection. The screaming may be so violent that the child becomes "black and blue" in the face, and occasionally it even terminates in a general convulsion. This, however, is unusual, and in my experience occurs only in children who suffer from convulsions without screaming and from other causes. Such paroxysms of screaming sometimes recur only with long intervals. The child may have one attack but this may not be repeated for some weeks, or even some months. On the other hand, they may recur ten or twelve times a night.

This screaming differs from delirium, as it does not occur in those diseases accompanied by delirium. Moreover, there is no incoherant talking or muttering, while some children can be roused from this

state and are then perfectly rational, although greatly frightened; it occurs only during sleep. The mothers often call it nightmare.

The children, the subjects of this affection, are very generaly pale, often ill-nourished, and out of health. The immediate cause of this screaming appears to be some disturbance of the stomuch and intestines. The nature of this affection of the intestinal canal may be very various in different cases, for one child may suffer from constipation while another is troubled with diarrhoea. This disturbance is very generally dependent on food illsuited to young children; for this irregularity of the bowels, and the screaming which accompanies it, are especially frequent in those children who have been brought up by hand, and who, consequently, suffer on the one hand from diarrhoa, on the other from constipation. Children thus reared suffer, as is well known, very generally from constipation, and pass hard pale lumpy motions, something like marbles. These masses may consist of fæces; they are often composed of coagulated undigested milk, of a yellowish or greenish yellow colour outside, but are white and cheesy within, looking like, and, indeed, being composed of curds of milk. (It may be here mentioned, in passing, that not uncommonly children pass by the bowels, or sometimes vomit, large masses of the same composition. These are generally two or four inches long, and about an inch in diameter. They often excite much wonder and anxiety on the part of the mother. When broken, the white curdy appearance at once declares their nature.) Children who suffer from the affection now under consideration are sometimes infested by thread worms, and also show signs of the altered condition of the mucous membrane of the stomach and intestines, by itching, heat, and dryness of the inner part of the nose, with itching at the anus. This screaming is increased by anything that interferes with the general health of the child. Thus, it is observed to be worse when the teeth are making their way through the gums, although the irritation and pain which arise from teething appear to be incapable of themselves of exciting this screaming. It is also made worse by slight attacks of catarrh of the lungs, or eruptions on the body. By treatment this screaming can usually be at once arrested. Both general and local treatment are in most cases required, the former to improve the general health, the latter to remove the conditions immediately exciting the screaming.

The diet should be attended to, and any irregularity in the hours at which food is given to the child, or any unsuitability in the nature of the food, must be remedied. Attention to these points will very generally arrest any diarrhæi which may be present, but constipution with hard shotty motions will generally prove more obstinate, for such

motions are almost invariably passed by young children under six months old when brought up by hand, and this although they may be correctly fed and take nothing but good cow's milk sufficiently diluted with water. We have seen that these hard, round, lumpy motions are partly composed of coagulated undigested milk. This coagulation in mass can sometimes be stayed by the addition to the milk of alkalies such as limewater or bicarbonate of soda. The latter is preferable for this purpose, as limewater confines the bowels, and thus bicarbonate of soda should be perferred.

If the bowels are confined, an active purgative will, in the great majority of cases, suffice to to stay the screaming, and will insure to the child calm and refreshing sleep. A powder of rhubarb and soda repeated every night, or every other night till three powders have been given, is useful. If the child be pale, and the constipation recurs and is obstinate, the following prescription will be found very advantageous—namely: Steel wine, to which is added a few drops of tincture of rhubarb, in quantities adapted to the age of the child and to the obstinacy of the constipation. Usually six drops of tiucture of rhubarb in a teaspoonfull of steel wine given three times a day will open freely and comfortably the bowels of a child from six to nine months old.

In order to effect a permanent cure it is often necessary to give medicines to improve the general health of the child, as these children are frequently pale and badly nourished.

Thus, in children suffering from the affection we have just described, to effect a permanent cure, if the general health be bad, treatment must be directed to the restoration of the body to sound health. In these cases iron, cod-liver oil, with cold sponging, prove most useful. Of the various preparations of iron, the tincture of the sesquichloride, in my experience, is decidedly the best.

It has appeared to me that bromide of potassium is able to stay this screaming, but as its administration has been accompanied by the use of purgatives, or a regulated diet, it is difficult to determine how far the bromide was useful. It is, however, I feel sure, worthy of a trial in obstinate, cases. Cold baths must be given with care; for while they may, if properly administered, do much good, if administered without certain precautions, they will do great harm to children. If too great a shock be given to the child, depression of the system will be produced, and this may last even several days after the bath is administered, when the child may be languid and depressed, and may suffer from much chilliness with loss of appetite. Thus the amount of shock produced

by the bath must be regulated to the age and strength of the child. In cold sponging of the body the shock caused is proportioned to the coldness of the water and the length of time the bath is continued; while the younger the child, or the weaker its health, the less able it is to bear up against the effect of the shock to which it is exposed. Hence with young children, and especially with those whose system is depressed, the bath should be continued only for a short time, and if the weather be cold, the water must be slightly warmed. When the child is weak, the bath should be continued at first for a few seconds only, and its duration be gradually increased as the child becomes accustomed to its use.

If the following simple plan be adopted, the child, even if very weak, can take the cold bath with advantage, and all chance of depression is removed. The child should be placed before a good fire, with its feet in warm water, while the cold water is freely poured over every part of the body except the head and face. The healthy reaction, with the agreeable sensations which follow the use of the bath, may be much increased by placing the child for a short time in the warm bed from which it had just previously been removed. The bath should be given immediately the child leaves its bed, and the breakfast soon after the sponging is completed.—Quarterly Jour. of Psychological Medicine.

#### TREATMENT OF MENORRHAGIA.

GREAT NORTHERN HOSPITAL .- For the last few years Dr. Murray has treated cases of menorrhagia-not dependent upon growth, displace ments, or other causes requiring special and manipulative interferenceby the combined use of gallic and sulphuric acids principally, with as much rest as can be obtained. The disease has generally shown itself in one of the three following forms: 1. Where at each period there has been a more decided loss than natural. 2. Where, from excessive debility a bloody discharge has continued from month to month. 3 Where, after childbearing, a large uterus with a patulous os is continually pouring out blood, and every now and then doing so in gushes accompanied by clots. In all these degrees of this weakening and troublesome complaint, Dr. Murray is in the habit of prescribing from five to ten grains of gallic acid with from fifteen to twenty-five minims of dilute sulphuric acid, twice or thrice daily, for a period sometimes extending over two months. Occasionally he has found the use of mustard applied over the sacrum every other night, or even a blister on the same spot, useful as a help in the third form of this hemorrhage. He has also advised the arplication of cold water to the lower part of the spine in cases of continued discharge (not leucorrhoal) between the periods.

Dr. Murray has not found the use of iron at all satisfactory; but he has administered it with good effect in some cases after a continuance of the acid mixture, and all arrest of hemorrhage for some time. The use of vaginal injections has not been recommended by Dr. Murray; but in many cases cold water enemata have been extremely useful at those moments when the gushes of blood with clots take place, a gentle non-irritating purgative being also given.

CHARING-CROSS HOSPITAL —Dr. Parson recommends rest as much as possible in all cases of menhorrhagia; and the avoidance of all household duties, at least for a few days, during the severity of the symptoms.

The astringent mixture in general use amongst the out-patients consists of tannic acid (from five to ten grains) dilute sulphuric acid (from twenty to thirty,) and the liquid extract of ergot of the British Pharmacopæia (from five to ten minims,) every four or five hours for the first few days. If there be much pain attending the menorrhagia, Dr. Parson usually orders from five to ten minims of the tineture of Indian hemp to each dose. Dr. Parson has never seen any ill result following the use of Indian hemp, but he has generally employed it in the former combination, or with other astringents.

As a general rule, all the preparations of iron are avoided in menorhagia, even though there be anæmia and pallor, since iron invariably increases the vascularity of the pelvic organs; and he employs the preparations of iron only when two or three menstrual periods have passed normally.

Aloes also is avoided, in most of its preparations, in all cases of menorrhagia, since it is apt to increase the irritability and vascularity of the pelvic viscera.

Menorrhagia associated with metritis is treated by astringents for the first few days. The bowels are regulated by a saline aperient—the bitartrate of potash in drachm doses, with quinine in half to one grain doses, taken every morning. After the period has ceased the usual treatment of metritis is employed.

Menorrhagia associated with a granular state of the mucous membrane of the cervix uteri is treated by astringents and tonics generally. A local astringent consisting of the solution of chloride of zinc (Burnett's), from twenty to thirty minims to every pint of water, is also used by the patient two or three times a day as a douche. Dr. Parson finds that a stronger astringent than this for local application is seldom, if ever, required in these cases.

The cases of menorrhgia associated with polypi are not treated with any benefit as out-patients, but are admitted as in-patients of the hospital.

Cases of menorrhagia resulting from the presence of fibroid tumors of he uterus are treated usually as in-patients also. Menorrhagia arising from cancer of the uterus, usually resists all treatment. From twenty to thirty minims of solution of chloride of zine to a pint of water often is more useful than any other douche in diminishing the fetor, and to some extent the amount of the discharges.

In the following cases of menorrhagia, where there are no local lesions of the generative organs, a brief summary of the treatment is as follows:— From debility, it is treated by the astringents during the period; after the period has ceased tonics are employed; excluding iron and aloes until the tendency to excessive menstruation has ceased, then the preparations of iron with nux vomica or strychnine become valuable.

When depending on congestion of the portal system, it is relieved by a daily aperient of bitartrate of potash with quinine, and with or without five or ten grains of jalap in each dose taken every morning, and avoidance of alcoholic stimulants.

Associated with mitral or aortic obstruction, menorrhagia is most difficult to relieve; and is treated on general principles—of diminishing the congestion of the pelvic organs as much as possible, and giving tone to the distended capillaries and veins.

Menorrhagia with emphysema or chronic bronchitis is also exceedingly difficult to relieve, and when relieved for a time, often returns.

Resulting from kidney disease and albuminuria, it is treated by warm clothing; aperients daily of compound jalap powder with quinine, given in the mornings, and the sesquichloride of iron with nux vomica two or three times a day, generally with marked improvement.

When associated with spongy gums and a scorbutic state, it is treated by the citrate and chlorate of potash; the patient being directed to avoid all salted meal; to take the juice of half a lemon every day; occasionally tannic acid is given in addition.—London Lancet,

#### CLINICAL LECTURE ON HEAT ERUPTIONS.

By C. HANDFIELD JONES, M.B.Cantab., F.R.S., Physician to St. Mary's Hospital.

Gentlemen,—during my last taking-in-week three cases of well-marked hyperæmial affections of the skin have been admitted, which may furnish us, I think, some instructive matter for consideration. I do not adduce them as instances similar in every respect, but in one very material particular, that of their causation, there appears to me to exist a close affinity between them.

Case. 1.—E. W., female, set. 28, admitted July 16th. Has been ailing a long time with weak digestion; was not worse until an eruption came out yester-morning. This appears at present (3 P. M.), as dull-red, slightly elevated, roundish spots, coalescing often in patches. It occupies

the face, neck, chest, abdomen, and, to a less extent, the limbs. On the abdomen the spots are well-defined and discrete. Eyes smart a good deal; tongue pretty clean; pulse 105, very weak; temperature 100°. Much pain in back last week, less the last two days; feels very hot. Has had measles; has marks of vaccination on her arms, but they are not perfect ones. Broth diet. Mist. salin ter die.

17th.—Is much better; the eruption has disappeared from the chest and neck, but is still evident on the abdomer, though declining here also. Mist. Quinæ § i. ter die. In two or three days she was free from any other ailment than debility. When this patient first came under our observation, we had some misgivings lest the disorder should prove to be modified variola, and we isolated her accordingly. The points which made it improbable that the affection was varioloid were these:—The temperature was but little elevated, the appearance of the eruption had not been preceded by marked illness; and the exanthem itself was of an indeterminate character, somewhat like that of measles. Though these features were tolerably decisive, yet it was right to take every possible precaution, and twenty-four hours waiting made all clear.

Case 2.—E. S., female, æt. 18, admitted July 17th, 1867. Has been attending on children affected with chicken-pox. On 13th inst. had a very bad headache; the next day had to go to bed feeling weak and queer. Sore throat came on, which has been very bad, but is now better; the fauces are red and inflamed, and there is mucus hanging from the soft palate. An eruption appeared this morning; it is well out all over the body except the face and the legs below the knees. In most of the affected parts it appears as red spots of a tolerably bright colour, not distinctly elevated, coalescing to some extent, especially on the elbows where it constitutes on each side a large, irregular, uniformly red patch. In some parts, as on the chest and abdomen, the appearance is rather that of subcutaneous mottling. Conjunctivæ nearly natural; face flushed; tongue very red and rather sore. No sleep last three nights; temperature  $100^{\circ}$ , pulse 93, soft; appetite poor. Quin. Disulph. gr. iij. + Acidi Nitrici m ij. + Spt. æth. chlor.  $m \times + Aq$ .  $\tilde{3}$  i. quater die.

19th.—Eruption almost entirely gone; throat much better. Went out well soon after. The throat affection, and the aspect of the tongue, increased the resemblance of the malady in this case to scarlatina. But the non-elevation of temperature, the moderate frequency of the pulse, the more spotted than uniformly diffused character of the eruption, the absence of any history of infection, and the hint afforded by the previous case that such exanthems might be looked for, weighed with me to regard it rather as a roseola, and this opinion was speedily confirmed by the result.

In themselves these cases are sufficiently trifling, but they are worth your attention, since, as Hebra states, an acquaintance with these forms of crythemata may save you from the common mistake of diagnosing every febrile complaint, attended with a reddening of the skin, as one of the contagious exanthemata. Such hasty conclusions he intimates often lead to disagreeable consequences. But further, we may surely say that the scientific interest of a disorder is by no means necessarily in proportion to its magnitude, and these slight derangements of the cutaneous circulation, occurring under the influence of heat, may aid us to understand better both the phenomena and the causation of other disorders with which they may appear, at first sight, to have no connection. Before I make further comment, let me relate another case of more severity and permanence, but yet occurring under very similar circumstances, and manifesting, I believe, a real affinity to the preceding.

Case 3.-W. G., et. 23, male, admitted July 18th, 1867, Began to ail on 17th inst., when he first perceived soreness in both axillæ; at night he found that the skin in this situation was red; since then the redness has extended very much, and now affects the whole of both arms up to the wrists as well as the dorsum of the hands, the upper parts of both thighs and the scrotum. In the rest of the thighs and of the legs the skin is covered over with largish red spots, which are more crowded together at the knees and posterior surfaces. The neck and ears are severely affected and there is serous alkaline discharge taking place at some parts. He had very much pain when the eruption came out; it is much less now The right fore-arm is very much swollen and is very red, the left is not so much. Heart's sounds normal; pulse 96, full, open; tougue a little coated; thirsty; urine said to be very dark; temp. 1010; health generally good, never suffered in same way before; before his illness he had overheated himself by running, and went out with his master's carriage immediately after, he did not feel chilled, but he ascribes his attack to this, as the disorder came on the next day; he had not drank any cold water after being heated; broth diet; magnesiæ suph. 3 i. + vini. colch.; m x. + mist. potass. citrat, 3 iss,, quater die; liq. plumbi diacet, 3 i. + glycerini 3 ij. + aq. distill. ad Oi. pro lotion.

19th.—Is better, eruption fading in colour, but the red spots on the abdomen have extended considerably, and many of them have partially coalesced, temp. 100°; pulse £4, soft, urine of yesterday acid, spec. grav. 1036, rather scanty, thick with lithates, not albuminous.

20th.—The abdomen is nearly covered with a continuous duli red hyperæmia, the upper thighs, groins, and scrotum are in nearly the same state; the flexures of the knees are also quite excoriated, very red and discharging, the arms are much improved, much less swelled. Quinæ

disulphat gr. i. + magnes. sulph. 3 i. + acidi. sulph. dil. m.x. + spt. ceth. chlor. m.x. + aq. 3 i. quater die. Ung. zinci. 3 i. + plumbi. sub. carb. 3 i. M. ft. ungt. in loco lotion.

27.—Is very much improved, the flexures of the knees, which were painted three days ago with soluti argenti nitr. (gr. x. ad. \( \frac{7}{3} \) i.) are much better; at the same date there were numerous red spots on the legs, which were unaltered by pressure, and were true petechiæ; dose of quinine increased on 22nd to gr iss,

31st.—The flexures of the elbows, and the groins, are in a condition of well-marked eezema, presenting tolerably extensive red patches which feel very hot and irritable, but do not discharge (eez. sic.) At their margins are seen several discrete red papules, which by their coalescence would add to their extent, and evidently constitute the initial lesion. The axillæ are in the same state, and contain besides, several furunculoid elevations of the corium (there are three of these in the right) which are very tender and inflamed; except in these parts the skin is normal or nearly so; urine in 24 hours, 56 oz., specific gravity 1016, palish, deposits crystals of uric acid; liq. potas. arsenitis m. v. + tr. calumb. m. x. + aq.  $\frac{\pi}{3}$  ss. ter die.

Aug. 7th.—Is now quite well, except some discharge from a furuncle in the right axilla.

It would be more correct to say that eczema was present in this case than that it was one of eczema. In truth, when at its height, the disorder was much more roseola of erythema than eczema, at least, in most parts the subcutaneous effusion, however, which was so apparent in the arms, belongs more to the latter than the former. The chief feature was the hyperæmia, which naturally gave rise to exudation either superficial or deep-seated; this was the case during the rise and culmination of the disorder, but in its latter stage, when it was much more limited, the characters of eczema completely predominated. It seems little likely, however, that the disease was not really the same throughout, that is in its essence, although appearing at different times. At the present day many are convinced that no satisfactory arrangement of cutaneous diseases can be formed by reference to their anatomical peculiarities, and I quite concur in the opinion although the terms in use serve well enough to distinguish the principal groups-squamous, papular, vesicular, bullous, maculated, are still epithets which are convenient and useful. But what we really want is a true pathology of these several forms. We ought to know as a first and elementary matter, whether they are dependant, all or any of them, on the presence of some materies morbi in the blood; whether this materies is different in the several anatomically different eruptions; how it is generated in the system, and whether it is to be got rid of by elimination or by inducing a better nutrition. Until we have accomplished something of this kind, we can, I believe, do nothing in the way of framing a real scientific arrangement of these disorders. Another question must also be considered - viz., whether different forms of eruption may not be essentially similar, as being products of the same cause, while other states, apparently quite similar, may be proved to be really very different on the ground of their etiology and therapy. Thus, a case of eczema may have much more affinity to one of lichen than it has to another case of eczema, because the two former may depend on the action of heat, and the latter on the gouty diathesis. In the case I have brought before you I believe the summer temperature was the most efficient cause of the eruption, and it may be worth our while to consider how it produces this effect. Direct exposure to solar heat will inflame and blister the skin as tourists often experience, but this is a mere local action confined to unprotected parts. True eruptions, diffused more or less widely over the surface, must be induced in a different way. The explanation of their occurrence is found, I believe, in the general statement (which no one can doubt), that heat, if at all excessive, is enfeebling to nervous and muscular tissue, both of the voluntary and involuntary departments. Paresis thus induced of the vaso-motor nerves supplying the small cutaneous vessels. allows distension of the capillaries to take place, and according as those of the papillæ, or of the subjacent plexuses are most affected, we may have at the outset a papular eruption or an erythema. Thus far it is opposed that the texture of the capillaries is unaltered, but if the morbid change goes farther, scrous effusion, or even actual escape of blood into the corium may ensue, both of which events took place in case 3. But dilatation, and weakening of the texture of vessels, are not the sole results of the paresis. The increased supply of blood acts as an excitant or irritant to the cutaneous tissue, alters its vital condition, and converts the active hyperæmia into actual inflammation. We have complete proof of this occurrence when suppuration takes place within and without the eyeballs, in consequence of long continued hyperaemia depending on arterial relaxation. I have known this happen in a case of Grave's disease, and also in a case of epilepsy. Confirmative evidence is also afforded by Vanzetti's observations relative to the cessation of inflammation in a limb after prolonged compression of the main artery. It is of great practical importance to recognize this state of tissue excitement, and the question of its existence should always be considered in planning the treatment. Its decline renders the administration of tonics and astringents admissible, which previously would have acted as irritants, and is generally announced by the duller red tint of the hyperæmic parts, which, however, as in our last case, may, at the same time, increase in extent.

The morbid effect of heat seems to be materially promoted by the presence of moisture. I have mentioned to you the case of a weakly female, in whom the application of a poultice produced a distinct eczematoid eruption in the part so treated. In his clinical lecture on sudoral exanthems, Trousseau relates the case of a poor lady, who, after her confinement, was kept by an old prejudiced nurse soaking in her lochia, with unchanged linen, loaded with wadding bed-clothes to bring on the flow of milk. Scarlatiniform eruption appeared on the sixth day of her illness, on the tenth the whole body was covered by a frightfully severe and confluent eczema. The face flushed, delirium came on, and death follow-Trousseau ascribes the eruption to the irritating effect of the copious perspiration. To my mind the moist heat seems quite a sufficient cause, and I feel doubtful as to the possibility of so much irritation being produced by sweat. Rheumatic fever patients often perspire copiously, and for a long time without any cutaneous eruption being produced. The prolonged soaking in hot water which patients undergo at Leukerbad. very commonly has the effect of bringing out on the surface an eruption termed "la poussée." This, according to the account given of it by Constantine James, begins as an erythema, but often develops into a pretty smart eczema. It is regarded as a desirable event, but as it is not essential to a cure, this may perhaps be doubted. At any rate it illustrates my statement, that cutaneous eruptions may be produced by heat without any irritation from the secretion of the perspiratory glands. Recently I had a gentleman under my care, who had been invalided and sent home from India on account of eczema of the face. When I saw him the condition was that of chronic erythema; his skin flushed and got very red if he faced the fire, or drank even light wine. In cold weather he was better.

The foregoing considerations will probably incline you to join with me in the belief that excessive heat is one of the causes of eczema, as well as of other cutaneous hyperæmiæ. There are plenty of other causes which act either alone, or in conjunction with heat, but with these I am not dealing now. My object at present is to set before you the strong probability that heat acting in the way I have described, may produce eruptions of greater or lesser magnitude, often very much resembling those of the true exanthemata; and, besides, capable of perplexing you very much if you are not aware of their real nature.

Now, if the pathology of these disorders be such as I have described, there can be no doubt as to their treatment. The weak vessels and nerves must be judiciously toned, and the hyperæmiæ and its effects will cease. You need have no fear whatever of repelling the cruption if you only proceed with common prudence. Mr. Naylor tells us that sailors af-

fected with prickly heat continually bathe in the sea without any ill effects, and his statements are in comformity with those of others. I have no doubt that the poor lady, whose case I cited just now, would have been greatly benefited by a good washing with cold water at least before her eczema was fully developed. Indeed, when actual inflammation has occurred and becomes severe, as was the case in my patient, I can believe that any abrupt repression of the process might prove injurious. But this is not on account of any materies morbi being driven away from the part but because the inflamed tissue is not tolerant of any sudden change in its condition. Sir Thomas Watson relates how a woman who had scalded her arm, immediately after immersed it in cold water, but was obliged to desist because severe rigors were brought on thereby. My reason for not administering quinine from the first to my patient W. G., was based in good measure on the same kind of apprehension. The inflammation had made the tissues so irritable that there was reason to fear that the tonic might not have been borne well. In three days time, with the aid of salines and colchicum, this state had lessened, and then the remedy guarded with a little neutral salt had a speedily beneficial effect. The occurrence of furuncles towards the close of an attack of eczema, as in this instance, is by no means unfrequent.

There is another point which I wish you to remark-viz, the evident affinity between these summer skin eruptions, and the diarrheas of hot weather. Both are essentially hyperæmiæ of vaso-motor nerve origin, one of the external, the other of the internal tegument. The much greater frequency of the latter depends probably on the greater supply of blood which the intestine receives, on the greater degree in which its vessels are under the sway of the sympathetic, and on the much greater delicacy of the epithelial investment of the membrane. The great prevalence of diarrhœa in tropical climates shows clearly that the influence of external temperature is felt throughout the body, as otherwise the presumption would be that, the blood being determined so freely to the skin and to its glands, there would be no tendency to hyperæmia of the internal mucous surface and its glands. Not only, however, is this very markedly the case, but another mucous tract the (uterine) is affected in a like way, and menorrhagia, as Sir Ranald Martin tells us, is a common occurrence. It seems to me very doubtful whether, what has been termed cutaneo-hepartic sympathy, is anything more than a part of that general paresis of arteries and their regulating nerves, which ensues as a result of a high temperature. Heat acting on the cutaneous nerves relaxes the vaso motor nerves of the superficial arteries, and of those of the internal organs, because in both instances it operates through the nervous centres .- Medical Press and Circular.

# Canada Medical Journal.

MONTREAL, NOVEMBER, 1867.

We beg to call the attention of our readers to a letter from Dr. Worthington of Sherbrooke, which will be found elsewhere in this number of the Journal, and we trust that the subject of adopting a uniform system of granting licenses to practice Medicine, Surgery, and Midwifery in the Dominion of Canada, will be fully argued and freely discussed. vite discussion on this topic, as we are of opinion that much good will We take exception to the views of Dr. Worthington result therefrom. and chiefly on the point of making the Canadian Medical Association in any way connected with the establishment of the licensing body of the What we would gladly see, and what we think is all we actually require, is an act of incorporation of the whole profession, with certain powers hereafter to be carefully drawn up, but at the same time independent of the Canadian Medical Association. The Canadian Medical Association has a far higher mission before it, if properly worked out. than that of regulating the study and practice of the profession. should be able to recommend certain salutary changes and reforms, and the expression of its opinion should have due weight in inducing those reforms; but inasmuch as it is a scientific body devoted to the advancement of the science of medicine, the subject of regulating the study and practice of Medicine, Surgery and Midwifery seems foreign to its role.

We have before us the experience of a very important body, the members of the profession in Great Britain, and we think that a law similar to that in force in the mother country, modified to suit our altered condition, is all we require. The profession of the Dominion should be incorporated, and by the conditions of that act they should have the power of electing so many representatives for each section, and each of the educational institutions should have the right of sending a given number of representatives; these representatives to constitute the general Medical Council. The Council should have powers of supervision, of prescribing certain laws for the governing of study, both preliminary and professional,

but should not in any way control the vested rights of universities, with which it is unadvisable to interfere; but in case any institution persist in a nonfulfilment of a prescribed curriculum, the council should be empowered to remove the name of that institution from its list of recognised schools, and forward a complaint against it to the government, whose flat should be necessary before a suspension of the privileges of said institutions could occur.

By these provisions all parties would be fully represented. The universities by their nominee, the profession by theirs. With regard to other minor points, they would be for after consideration and legislation. This scheme seems to us the most feasable, and in adopting it the profession in the Dominion would after the lapse of the first probationary period, be as well represented as it is at the present board of Governors of the College of Physicians and Surgeons of Lower Canada.

With well merited sarcasm, the London Lancet, under date July 20, states in an editorial annotation headed the Medical Council of Canada, that "The Canadians point with no little pride to the fact, that many of their number after entering the profession at home, cross the Atlantic, and return with diplomas of our time-honoured institutions, of which they think so much, after passing most creditable examinations." (The italics are ours.) This is not altogether correct, 'tis true that many of our Canadian graduates seek the honours conferred by the institutions of the Mother Country, but not because those time honoured institutions possess privileges and vested rights which date back for centuries, but, because in large cities like London, Edinburgh, Dublin, Paris, and other European capitals, there are to be met with greater facilities for practically studying their profession by attending large hospitals, and witnessing the Medical, Surgical and Obstetric practice of men whose lives have been devoted to some one specialty.

We notice a degree of liberality exists in the councils of our brethren on the other side of the Atlantic. There is a desire to throw open their doors to such colonists, graduates of recognised schools in their own colony, who are desirous of practising their profession in the mother country. This is exceedingly gratifying as it is a graceful acknowledgement of the high appreciation of our educational institutions. A motion is on foot among a few Canadians to close our doors to graduates of the British school. This we deem premature and unwise, and is the very thing that will arrest that liberal interchange of sentiments of regard which is in everyway desirable. In adopting a new regime, all these points should be carefully weighed, and nothing should be done

hastily. We trust, that all who are interested in the well-ordering of the profession, will give this subject their careful consideration, and we sincerely hope, that free discussions will be freely indulged in, as it is sufficiently obvious that our present system of granting license to practice in some parts of the Dominion of Canada is very imperfect.

Alia tentanda via est.

#### LOOSE STATEMENTS.

A statement which has been going the rounds of the medical press both at home and in the United States was made by Dr. Hingston, of Montreal, at the late International Medical Conference in Paris, and which is of so extraordinary a nature, that we are obliged to take notice of it. We copy from the Boston Medical and Surgical Journal of Oct. 17:

"A physician frem Montreal, Dr. Hingston, made the following important statement at the International Medical Conference, with regard to the prevailing disease in Canada. He said that the two races inhabiting Canada, the French-Canadians and the English, follow a very different regimen and are subject to very different diseases. The French-Canadians eat much animal food-two or three pounds of pork daily. The English eat much less of it. Among the latter pulmonary disease prodominate. while those of the digestive system are more numerous among the former . but these are so frequent and generally so mild in character, that he does not advise French physicians emigrating to America to turn their steps to Canada with a view to practise among their old compatriots, for they will not give them aliving. The French-Canadians are in general more robust, larger and more muscular than the French as he had been able to satisfy himself during his visit to France, and as he had noticed among the students of the two schools of medicine of the University of Montreal, the one French and the other English. Must we attribute, asks Dr. Hingston, these distinctive and strongly marked peculiarities exclusively to the difference of food, or to a longer acclimatization by the French. Canadians, whose ancestors were the first colonists of Canada?"

In this quotation it will be observed that it is asserted that the French Canadians eat two or three pounds of pork daily. This is an exaggeration of a very serious nature, if applied to the French Canadians as a race, and if, as is surmised, this amount is to be taken as their average daily consumption. If it is applied to the very small proportion of the French community employed in our lumber districts it is again incorrect. The allowance for men employed on Government surveys is one pound of pork and one pound of bread per day for each individual; and we have it from undoubted authority that a barrel of pork which weighs 200 lbs.

will last a gang of 20 men on an average from six to ten days. In the former instance it would give to each individual a little over one pound and a half per day, and in the latter case exactly one pound. It must be born in mind that this is not their sole aliment, as they are supplied with bread and vegetables, such as pease, beans, but very seldom potatoes, and a liberal amount of tea. This forms the food of the lumbering class. If we take the class of Canadian French who reside in our cities their consumption of animal food is very much less in amount; and again if we look to the alimentation of the class of farm labourers, it consists in a large measure of bread, milk, onions, garlick and fish. Their pork is too valuable for their own consumption, and they generally reserve it for market. It would seem from the following extract of Dr. Hingston's assertion that he is made to draws a most singularly untrathful comparison between the French Canadians and those of British origin, as regards their vigour and general physique:

"According to Dr. Hingston, the well-known surgeon of Montreal, the Franco-Canadians eat a great deal of meat; the Anglo-Canadians very little. The former are robust, and the diseases which predominate amongst them are those of the digestive apparatus. The English are less vigorous, and pulmonary diseases prevail amongst them. Here is a strong argument in favour of beef."—British Medical Journal, Oct. 26.

Comment on this point is unnecessary, as those acquainted with the facts as they stand are fully aware that the Canadian population of English, Irish, and Scotch descent are universally superior in physique and appearance to those of their French Canadian fellow colonists.

We cannot agree with the doctor in the other point at issue, viz., that pulmonary diseases are more frequent among the British and less so among the French population, as from experience we hold that diseases of the lungs are quite as prevalent with the one class as with the other. We only refer to this subject because we cannot allow a question having such important bearings on the salubrious character of our country to go unchallenged.

#### BROMIDE OF AMMONIUM.

Bromide of ammonium is one of the best remedies we have ever used in whooping cough. To a child two years old, two or three grains may be used three times a day. Its value is enhanced by the addition of hydrocianic acid and stramonium. We use a formula such as this: bromid. ammon., 60 grains; hydrocyanic acid, 20 minims tine. stramonium. 20 minims; water and syrup, 4 ounces. A teaspoon full of this mixture three times a day to a child of two years, will seldom fail to produce a marked impression within twenty-four hours.

# MEDICAL AND SURGICAL REPORT OF THE MONTREAL GENERAL HOSPITAL

FOR THE YEAR ENDING 30TH APRIL, 1867.

DISEASES, ACCIDENTS, &C., TREATED DURING THE YEAR IN THE HOSPITAL

DISEASES, &C.	Discharged.	Died.	Diseases, &c.	Discharged.	Died.
Abortio	3	1	Fistula in Ano	6	
Abscessus	16		" Vesico Vaginal	3	2
Adenitis	3	1	Fractura Brachii Simp	3	
Ambustio	13		" Comp. Comm.	1	
Amaurosis	3		" Comp. Comm " Cruris Simp	2	
Amenorrhes	3		" " Comp	1 2 2 1	1
Amoutatio	3		" Claviculi	1	
Anæmia	11		" Costarum	2	
Anasarca	3		" Cranii		2
Anteversio uteri	3 3 2	_	" Femoris Simp	6	
Anthrax	3	1	" Comp		1
Asthma	2		ribuide	5	
Ascites	1		Liumen	2 2 1 1 7	
Ataxia musc progress			Comp	1	
Balanitis	1 23	1	metacarpi	1	
Bronchitis Ac	5	2	" Maxillæ Inf	1 7	
			" Comp	l i	
Bubo Calculus Vesicæ	8 2 2 1		" Scapulæ	i	
Carcinoma Ventriculi	2		" Tibiæ	5	
" Linguæ	1		" Ulnæ	ĭ	
" Henatia		1	" Vertebrarum	1152131	
" Mammæ	3		Furunculus	5	
" Recti	2		Gastrodynia	2	
" Mamma " Recti		3	Gangrena senil	1	
Caries	5		Gelatio	3	
Catarrh	4	1	Glaucoma	1	
Cataracta	7 2		Gonorrhœa	6	
Cellulitis	2	٠, ا	Hæmorrhoides	4	
Cholera Canad	2	1	Hernia	1	
Chlorosis	Z	1	Hemiplegia	1	7
Cirrhosis Hepatis	1	1	Hydatides Hepatis	1	1
Cieatr X	1	1	Hydrocephalus Chron	1	
Conjunctivitis	1 3	_ ^	Hypochondriasis	2	
Contractio genu	ĭ		Hysteria	7	
Contusio	50		Icterus	1 1 2 7 1 2 2 2 4 1 1 1 2 3 1	
Constipatio			Impetigo	2	
Colica	2 2 2		Insolatio	2	
" Pictonum	2		Iritis Syph	2	
Cystitis	2		Laryngitis Acut,	4	
Debilitas	33	2	Lepra	1	l
Post part	3		Leucoma	1 1	
Delirium tremens	8 45	1	Leucorrhœa. Luxatio Brachii	9	
" Chron	2	î	" Ulnæ	3	
Dyspepsia	14		" Maxillæ	1	
Dysenteria	24	2	Lumbago	12	
Ebriositas	4		Mania Subac		
Eclampsia	1		Melanosis Oculi	1	
Entropion	1		Menorrhagia	1	
Eczema	7		Mastitis	1	1
Ecthyma	1 7 1 5		Morbus Brightii	2	}
Epilepsia	5		" Cordis	1 1 1 1 2 7 3	
Emphysema Pulm	3	2		3	
Erisipelas	19		Morbilli. Noma	3	1
Empyema	1 2 1		Necrosis	0	1
Epithelioma Epistaxis	1		Nephritis	1	1
Erythema	1		Onychia	1 5	
Febricula	49		Ophhalmia Var	49	
Febris Catarrh	2		Ophthalmitis Traumat	20	
" Typhoides	24	6	Orchitis	20	
" Typhus	. 3	2	Ostitis	13	
" Intermittens	4		Paronychia	13	
" A potu	23		Periostitis Acut	3	1
" Puerperal	1		Paraphymosis	1	

DISEASES, &C.	Discharged	Died.	Diseases, &c.	Discharged	Died.
Paralysis	3		Strabismus	1	-
Peritonitis	3 2 1	1	Subluxatio	3 6 2 1 44	
Pharyngitis	1	00	Synovitis Acut	3	
Phthisis Pityriasis	38	22	Chron	6	
Pleuritis	38 2 3 1 5 29 1 2 2 1	1	Scarlatina	1	
Pleurodynia	1		" Acut	41	
Pleurodynia	5	1	" Consec	9113	2
Pneumonia Prolapsus Ani Uteri.	29	2	Tænia Solium	1	
Prolapsus Ani	1 0	1	Tenotomy	1	1
Psoriasis	2	1	Tonsillitis	4	
Ptosis	1		Trichiasis	î	
Pyelitis		1	Toxicatio	1 1 1 8	
Purpura Hemorrh. 'Simplex, Pyemia. Rheumatismus Chron	2	1	Tumor Var	8	1
Simplex,	1	1	Ulcus	00	1
Phoumatienue Chron	29		Ulcus	02	
" Musc	17		" Uteri	1	
" Aent.	19		Vaginitis	1	
Rosalia Idiopath Rupia Syphil Scabies.	10		Varicocele	62 3 1 1 2 12	1
Rupia Syphil	2		Variola	12	4
Scaples	27		Varioloid	32	
SciaticaStaphyloma	9		Vulnus	34	1
Strict. rethræ	2		Total	1136	87
" Recti					1
OPERATION	VS.	&c	DURING THE YEAR.		
Major Operations.	,	.,			. 1
Amputation of Arm		5	Removal of Thumb of Fingers		. 3
" of Shoulder Joint		. 1	of Toe		. 8
of Foot (Chouart)		. 1	of Metacarpal Bone		. ]
" of " (Syme's)		. 1 1 . 5	or log nail		
of " (Hayes)		. 1	" of Sequestrum		1 5
of Broast		3	for Lachrymal Fistula		
of Breast		5	for Strabismus.		. 1
Excision of Elbow		. 5 . 1 . 1	for Entropion.		
" of Knee		. 1	" for Webbed ingers		
" of Thigh Excision of Elbow. " of Knee. " of Os Calcis. " of Eyeball.		. 1	for Circumcision		
Lithotomy		. 2	Operation for Staphyloma, Critchet	t	1
Perineal Section for Stricture		2 3 1 1 2 2 2 2 1	Operation for Staphyloma, Oritchet  for Harelip  for Fistula in Ano		. ]
Ligature of Radial Artery		. î	" for Fistula in Ano		. 1
Ligature of Radial Artery Operation for Extensive Cicatrix		. 2	Iridectomy		. 1
for Contraction of Knee		. 2	Tenotomy		
" Hip	10	. 2	Hydroceles Tapped		
" for Vesico Vaginal Fisti	1124	1	Setons Introduced		. 1
for Hernia Strangulated Radical Cure (	Wood	4) 7	Keratonyxis. Hydroceles Tapped. Setons Introduced. Cuppings.		. 1
" for Staphyloraphy		2	Catheterisms		. 0
" for Procidentia Uteri		1	Vaccinations		. 2
" for Staphyloraphy " for Procidentia Uteri Removal of Submaxillary Tumor		1	Incisions, Various		. 16
of Axillary " of Tumor from Thigh		2	Wounds dressed		. 33
					-
" of Testis		. 2	Total		. 96
" of Fatty Tumor		1			
" of Testis		8			
Tapping Abdomen		1	Fractures treated Outdoor		
Total		57			. 1
Minor Operations.			Fractures treated Indoor.		
Removal of Hæmorrhoids		2	Simple		. 4
-	• • • • •		Simple		. 4

Dislocations Outdoor.		Dislocations Indoor.
Dislocation of Elbow	3 1 1	Dislocation of Arm
Total		TotalSEPH M. DRAKE, M D., House Surgeon.

#### A RAID ON THE UTERUS.

A distinguished surgeon in New York city, twenty-five years ago, said, when Dupuytren's operation for relaxation of the sphincter ani was in vogue, every young man who came from Paris found every other individual's anus too large, and proceeded to pucker it up. The result was that New York anuses looked like gimlet-holes in a piece of pork, It seems to me that just such a raid is being made upon the uterus at this time. It is a harmless, inoffensive little organ, stowed away in a quiet place. Simply a muscular organ, having no function to perform save at certain periods of life, but furnishing a capital field for surgical operations, and is now-a-days subject to all sorts of barbarity from surgeons anxious for notoriety. Had Dame Nature foreseen this, she would have made it iron-clad. What with burning and cauterizing, cutting and slashing, and gouging, and spitting and skewering, and pessarying, the old-fashioned womb will cease to exist, except in history. The Transactions of the National Medical Association for 1864, has figured one hundred and twenty-three different kinds of pessaries, embracing every variety, from a simple plug to a patent threshing machine, which can only be worn with the largest hoops. They look like the drawings of turbine water-wheels, or a leaf from a work on entomology. Pessaries, I suppose, are sometimes useful, but there are more than there is any necessity for. I do think that this filling the vagina with such traps, making a Chinese toy-shop of it, is outrageous. Hippocrates said that he would never recommend a pessary to procure abortion—nay, he swore he never would. Were he alive now he would never recommend one at all. If there were fewer abortions there would be fewer pessaries, and if there were fewer pessaries there would be fewer abortions. Our grandmothers never knew they had wombs, save as they were reminded of it by the struggles of a healthy fœtus; which, by the by, they always held Now-a-days, even our young women must have their wombs shored up, and if a baby accidently gets in by the side of the machinery and finds a lodgment in the uterus, it may, perhance, have a knittingneedle stuck in its eyes before it has any. It is the easiest thing in the world to introduce a speculum and pretend to discover ulceration of the os, and subject a patient to this revolting manipulation once or twice a week, when there is, in fact, nothing the matter. By some practitioners, all diseases which occur in the female are attributed to the uterus. this class are especially to be included many who make of the abnormal conditions of the uterus a speciaty.—Extract from the address of Dr. W. D. Buck, Prest. of the New Hampshire State Medical Society for 1866, in Boston Jour Med.

## CANADA

# MEDICAL JOURNAL

#### ORIGINAL COMMUNICATIONS.

Lectures on the Pathology and Treatment of Joint Diseases. By Louis Bauer, M. D., M. R. C. S., Eng., &c.

V.

#### TREATMENT OF JOINT DISEASES-Continued.

In the third stage of joint diseases we have still more to deal with both extensive and continued changes in which mostly all the component parts of the articulation are compromised. In whatever tissue the malady might have started, in its progress it has comprised the rest. Thus in synovitis, the articular cartilages have been exposed to constant maceration of pus, and have suffered those elementary metamorphoses to which I invited your attention on a prior occasion. And when at last they drop off in rags and fragments, the osseous surfaces of the epiphyses are in turn subjected to the same obnoxious actions.

With the progress of their disintegration, the periarticular structures become more or less invaded and gradually manifest conditions very similar to those of white swelling. If, on the other hand, the primary affections of the periosteum and epiphysis proceed to the perforation of the articular cavity, it is self-evident that its lining must suffer appropriate alterations. The third stage is consequently a disease of the entire articulation, and its treatment a formidable object of the healing art.

Notwithstanding the undeniable difficulties of these affections, quite a large proportion of the patients recover with or without aid, and sometimes under domestic surroundings of the humblest kind; whereas others run their course to destruction in spite of therapeutic efforts and hygienic advantages. The reason of this difference is not always apparent. Occasionally the abscess determines where the joint gives way to the centri-

VOL. IV.

fugal action of the pus. If, for instance, the pus escapes through the floor of the acetabulum, it spreads over the internal surface of the pelvic bones, by detaching the periosteum, and may eventually make its appearance below Poupart's ligament, or through the ischiatic notch, or between the gluteal muscles. Irrespective to the lesion of the hip joint itself, this condition alone would constitute a frightful disease, sure to terminate disastrously. Similar complications may occur with other joints and aggravate their respective diseases.

The indications of treatment diversify with the complications presenting. Generally speaking the same therapeutic rules come into play at this juncture which have been already detailed. Rest and position, exercise, even in these aggravated cases of joint disease, their beneficial influence, but the appliances should be portative so as to allow the patient the conditional enjoyment of open air perambulations. Of these the patient is greatly in need to sustain his constitutional standard. The appliances should, moreover, be such as would not be easily saturated and soiled by the discharges. James Startin's suggestion to impregnate the bandages and splints of felt, with an equal mixture of melted paraffine and stearine, for the double purpose of stiffening and rendering them watertight, is certainly deserving of attention.

I have not as yet employed this material, but it seems to me preferable to varnish coating heretofore used.

It is self-evident that the fixture of the joint is an essential disideratum to prevent the corroded surfaces of the epiphyses from grinding upon one another, and thereby give rise to pain and renewed irritation.

The fistulous openings should be maintained and their drainage kept free. This is, however, no easy task, because their sinuses are very circuitous, and dilatation by laminaria or compressed sponge, impracticable. The laying open of the tracts by the knife is mostly of but temporary assistance, incurring loss of blood which patients can scarcely bear. The employment of potassa c. calce (Kirkpatrick) to open direct communication between the articular cavity and the surface, deserves surgical consideration.

Abscesses frequently form in the circumference of joints. Those which are attended with great swelling, pain and fever, and indicate the efforts of nature to eliminate structural detritus, should be promptly and fully opened; those which appear more or less remote from the articulation and cause no local or general inconvenience (cold and consecutive abscess: abscessus congestionis) may be ignored as long as they do not raise alarm by their size and pressure upon important parts. Their contents readily undergo fatty degeneration, followed by gradual resorption. But if they

require opening it should be done by trochar with the exclusion of air. The knife should only then be employed when air has entered the pyogenic cavity, and decomposed its contents. In this way septicæmia with its fatal consequences can be averted.

With a view of bringing about a more decided detachment and diminution of the structural detritus, various means have been recommended. John Gay insists upon free incisions into the affected joint; others allege they have successfully employed the seton, and Kirkpatrick favours an opening with his escharotic into the joint and uses it freely upon the osteoporotic substance; and finally exsection. The two former apply only to superficial and accessible joints, and all four are necessarily followed by copious suppuration. They are therefore but available in well preserved constitutions, and in superficial caries of the articular faces.

It is obvious that no debilitated patient can pass unharmed through so consuming an ordeal. As to exsection I beg to submit:

I. That if a thick slice is removed from the epiphyses, we approximate the cartilaginous disks fastening them to the shaft, which may thus become involved, protract and even prevent the reunion.

II. That if we comprise the cartilaginous disks in the operation, the extremities become so much shortened as to render the result nugatory, and the artificial leg preferable.

III. That the exsection of single tarsal and carpal bones is but very exceptionally attended with good results on account of the existing intercommunication of the tarsal and carpal joints.

The arrest in the growth of extremities operated upon by exsection, as observed by Kœnig of Hanau,\* is probably founded on error and should not prevent us from resorting to so legitimate an operation in its proper place. The growth is impeded by the previous disease, a fact most probably ignored by that author.

From these remarks it appears that exsection, as well as amputation, has its defined therapeutic value, and one cannot well be substituted for the other without risk and injury to the patient. I have nothing to do with the technicalities of either operation at this juncture.

Permit me, however, to tender my advice in reference to two points in exsection.

I. Before proceeding with the operation, overcome, if possible, the existing malposition by dividing the contracted muscles. I have mostly taken these preparatory steps and thereby secured perfect control of the subsequent position of the extremity. I owe, perhaps, to the observance

<sup>\*</sup> Archive of Clinical Surgery, Berlin, 1867.

of this preliminary measure, the happy results that have attended my operations, more particularly at the knee joint. Whereas some of my surgical friends who neglected it, had great trouble to maintain position, and lost their patients. The supposition that the shortening of the limb is sufficient to relax the contracted muscles, proved, in their respective cases to be, erroneous.

II. I remove with great care and accuracy as much of the synovial membrane, serous slides and bursæ (Bilroth) as are extant and exposed to air, for they will suppurate and materially retard union.

At this juncture the debilitated state of the constitution deserves the closest attention. No medication will, however, be of service as long as the local troubles are not mitigated by a proper course of local treatment.

The amelioration of the articular disease is the most direct way of relieving constitutional reaction. Nevertheless, quinine, iron, cod liver oil and sedatives may be needed to control fever, promote hæmatosis, supply an easily digested nutriment, and secure repose and immunity from pain.

In morbus coxarius the principles of division of the morbid periods rest on a different foundation, and accordingly the third stage of that disease is determined by the spontaneous disruption of the articulation and a peculiar malposition of the affected member.

It is of course necessary to ascertain the anatomical and clinical character of the existing malady, to determine the plan for therapeutic action.

If the inflammatory character of the disease still prevails, the appropriate means will readily suggest themselves from preceding remarks; and as readily if caries has ensued. The contracted muscles require division to allow the reduction of the existing malposition. Next, the articulation should be kept at rest by means and appliances with which we have already become acquainted; irrespective to the prevailing state of the joint; being equally beneficial in arresting articular inflammation as preventative to the irritative grating of carious surfaces upon one another.

If anchylosis should thus ensue, it will take place in the most desirable and useful position of the extremity.

Locomotion of the patient renders the use of crutches indispensible, the weight of the body will aggravate the local trouble. Only when the caput femoris shows disposition to slide up and backwards, does extension become imperative. My portative apparatus (fig. 6) answers the indications.

When, however, no improvements in the pathological condition of the joint follow this treatment, when caries and suppuration continue, and

threaten the patient with heetic, then the exsection of the head of the femur is justifiable and appropriate.

Fortunately the rational and successful treatment of morbus coxarius, lessens the exigency of that operation, and to this fact we may ascribe the present rarity of its preformance.

Notwithstanding the avowed aversion of French surgeons to this operation, it cannot be denied that it has furnished a fair statistic of success, and that it has saved the life of many a patient, which otherwise would have been lost.

Of the seventeen partial exsections of the hip joint which I have performed in the course of my surgical career, nine were attended by recovery and two are still under treatment.

The limbs have been shortened from one to three inches.

With the exception of one case, the sclerotic tissue formed between the acetabulum and the shaft of the femur, permitted a moderate mobility and is strong enough to bear the superincumbent weight of the body.

That case concerns a young lady upon whom I operated in the year 1856 when she was nine years of age. Owing to monstrous obesity, the intermediate substance has never become firm. I have seen this patient but lately, she has grown to be a handsome and healthy woman; and I have again had an opportunity of examining into her condition. When she stands on her right limb, the mere weight of her left suffices to bring it to its full length. But if she rests upon the latter, the intermediate substance bends outwards and allows the shaft of the femur to come in contact with the acetabulum, by which the limb is three inches shortened. In this positon she can bear the entire weight of the body upon the affected side. My apparatus gives her the desired support for locomotion, and with it her gait is easy and graceful.

I apprehend that some of the exsections which I have performed, have been under rather unfavourable circumstances, and yet withal the conjoint result is anything but discouraging; some of my patients died of other diseases (two of laryngeal diphtheria, and one of cerebral meningitis) evidently connected with the impoverished state of their respective nutrition.

Though I am not a great admirer of exsection of the hip joint, nevertheless I honestly believe that its performance when warranted by the anatomical changes of the joint, bids as fair a chance of success as the exsection of any other joint. It is scarcely necessary to remove carious portions of the acetabulum unless very accessible, for the nutrition of that portion of the pelvis is unimpaired, and inasmuch as it remains accessible to local appliances, it becomes soon repaired.

In those patients who died after the operation, I invariably found the acetabulum restored to its integrity.

#### VI

#### TREATMENT OF THE SEQUELAE OF JOINT DISEASES.

The most judicious and diligent treatment succeeds but rarely in restoring the affected articulations to a perfectly normal status. There remains generally some tenderness of the articulation, which shows itself after a liberal use, and on changes of the weather. Besides a certain stiffness and dryness may continue a long time after the disease has become completely extinct.

The treatment of this symptom may be fulfilled with aromatic lubrications, cold and warm douche, flannel bandaging, the longer use of "sole baths," which in Germany have acquired great reputation in these troubles. More than all, passive and active exercises are best calculated to give permanent relief. Even slight malpositions may be gradually overcome in this way. There are quacks in every country who acquire reputation and lucre from the treatment of these articular impediments, and surgeons may learn from them the undeniable benefit of the use of apparently so insignificant remedies as lubricating frictions and passive exercises. I have myself to acknowledge some practical information from this rather turbid source. Having straightened the contracted knee of a lady patient, and repeatedly moved the same under chloroform without succeeding. I at last gave it up. After some months I again met her, with a perfectly flexible and useful joint, and learned that a female quack had restored her extremity to usefulness by persistent and daily lubrications and passive motions. In the beginning, the treatment had been very painful and almost unendurable; but gradually the pain had subsided. I need not to assure you gentlemen, that this lesson was never forgotten by me; and I am anxious to impart its benefit to you. If you have no time yourself, I would advise you to employ menial hands, but do not give quackery a pretence to superior skill and practical efficiency.

The passive motions are best commenced with the assistance of chloroform, which will enable us to overcome impediments, without any hazard whatever to the patient. Tenderness of the joint may follow, but will subside with a day or two of rest. The passive motions should then be renewed with or without chloroform, as the case demands, and should be carried on until the desired results are achieved. The patient may greatly assist our efforts by appropriate movements.

If however, the previous treatment has been inefficient and regardless

of consequences, the patient will present more aggravated conditions. The very best treatment is no sure protection against an obliteration of the articular cavity; but malposition of the joint, may and should always be prevented.

Anchylosis, forms then, another object of after treatment. Surgery discriminates two forms; the false or fibrous, and the true or bony, to which might be added a third, by bony bands or osteophytes. The first consists of partial or total connection of the articular faces by sclerotic tissue, the second in the bony interposition, and the third forms a partial osseous involucrum of the joint. The false anchylosis results from synovitis, both primary and consecutive; the true from penetrating wounds and caries of the articular faces; and the last from sup purative periostitis.

There is always more or less mobility in false anchylosis, but there is no vestige when osseous material forms the connecting link. When muscular contractions existed previous to the agglutination of the articular faces, the mutual anatomical relations of the latter are invariably changed.

The treatment of anchylosis has always been a cherished object of surgery from Hippocrates down to the present time. Success is, however, but of recent date.

Gradual extension for the purpose of overcoming fibrous anchylosis is an old surgical proceeding and has from time to time found advocates in the professional ranks. Mechanical ingenuity has found a fruitful field for display in the construction of all sorts of instruments; the latest method imtroduced is that by pulley and weight.

The usefulness of gradual extension in the treatment of fibrous anchylosis, is for obvious reasons but *limited* and *conditional*, and the attempt to substitute the same for *brisement forcé* is a failure.

The anatomical conditions resulting from joint diseases are but exceptionally amenable to that method: it is tedious at best, and frequently so painful as not to be borne by many patients. It's claimed superiority is, moreover, anything but conclusive. Nevertheless we meet with cases in which the elastic resistance of intra-articular adhesions and of the capsular ligament can be but overcome by gradual and persistent extension, and in these it seems to be the only remedy. These conditions we recognize only after unsuccessful attempts at brisement forcé and the latter has therefore to precede.

Such cases may be rare and constitute but a small fraction in statistics, but they do exist, notwithstanding their denial.

I possess two specimens of this very character, in my collection, both derived by amputation of the thigh. One belongs to a lady who had

contracted fibrous anchylosis of the knee from rheumatic synovitis, aggravated by contraction of the hamstring muscles. Before coming under my charge, she had suffered brisement force without previous division of the contracted flexor muscles. Violent reactive inflammation of the joint followed the forcible extension, and the latter was too painful to be maintained. The integuments sloughed at the internal circumference of the articulation, and her constitution was so violently shaken that her recovery was placed in jeopardy; and when, after many months of severe suffering, she had regained her strength, she was to all intents and purposes in a worse condition than before the operation. Moreover, the leg was in so high graded a state of hyperæsthæsia, that she could not bear the slightest touch, and the thickened epidermis was peeling off in large patches. Although desirous of amputation, I deemed it my duty to try once more brisement forcé Assuming that the omission of myotomy was the cause of the disastrous failure in the first instance, I divided the contracted hamstring muscles previous to the operation. I met no difficulty in breaking down the intra-articular impediments, but I exerted my entire physical strength in vain in attempting to fully extend the leg. I succeeded, perhaps, to an angle of 160° but could not keep the leg in the same. It would jerk back in an instant as soon as I relinguished my efforts.

Applying in the usual manner, longitudinal adhesive straps, and fastening to the same a weight of fifteen pounds, I tried gradual extension over a pulley. No re-action ensued. The limb yielded but very sparingly to extension, and the improvement during the following fortnight was just noticeable. A second effort was then made terminating as before. I was certain that the muscles had no part in the resistance, having been thoroughly divided. The patient lost all confidence in her eventual relief, and insisted on amputation, which I dared not refuse; for irrespective to the deformity, the hyperæsthæsia alone rendered her condition insufferable. The examination of the specimen revealed the fact that the resistance was exclusively due to the posterior wall of the capsular ligament, which was greatly thickened and pervaded with copious elastic fibres. Even after I had cleared it of tendons, lateral and crucial ligaments, it was impossible to straighten the joint.

The other specimen refers to a little girl eight years of age, who had two years previously acquired an affection of the knee joint through traumatic injury. When I took charge of the case I found her knee joint in an angular position and its mobility greatly impeded by intra-articular adhesions. There were some fistulous openings at the internal circumference of the articulation, at the bottom of which bare bone could be felt to a limited extent.

In attempting to perform brisement forcé, the resistance of the adhesions was very great, and though I proceeded with great care and precaution, I had the misfortune to produce diastasis of the femoral epiphysis. The limb was again placed in its original malposition and kept at rest, and well sustained by plaster of paris bandages. No trouble at all followed the unsuccessful attempt, and the epiphysis was in due time found firmly united with its shaft. Though I did not feel inclined to hazard another trial of the same kind, but was prevailed upon by the uncle of the patient, who is himself an esteemed physician, and by the family at large. You may well suppose that I was very timorous in the second attempt, and that I used no undue force. In fact the extension of the limb was effected by straight traction and without using the respective bones as levers. On this occasion I succeeded in opening the angle considerably, without being able to straighten the limb completely. But, as in the former case, there was an elastic resistance to contend with, which reduced the angle at once as soon as the tractions were slackened. Moreover the extension of the limb was accomplished at the expense of a shifting of the tibia backward on the femur, and a slight bending of the tibia and femur. There was no separation of the articular faces. Although I had again divided the hamstring muscles, and again allowed the limb to resume its old malposition, nevertheless the ensuing re-action was quite formidable. The patient being of a very delicate and nervous constitution, could not have endured without succumbing to the violence of the symptoms, and therefore amputation was resorted to to avert the fatal catastrophe. Happily, recovery ensued without any untoward occurrence.

In this specimen the resistance was due to the strength and elasticity of the intra-articular fibrous adhesions, and I was unable to overcome it by any means short of entire demolition of the specimen. In attempting to straighten the same, the epiphyses of both constituent bones were proportionately compressed and the shafts bent, whilst the anatomical relations of the joint remained unchanged.

It is very evident that from these and similar causes, the extension per force, is not always practicable, and there remains, consequently, a limited orthopaedic field for the employment of gradual extension.

When in London, I saw a young woman at the Royal Orthopædic Hospital, who had been successfully relieved by gradual extension, from a fearful distortion, caused by a very thick, and apparently unyielding cicatrix, the result of an extensive burn. Her chin had been literally drawn down and fixed to the chest. She was then still under treatment, but her head stood already creet, and most of its motions were free; the cica-

trix was soft and pliable. This startling result had been achieved by persistent gradual extension throughout three successive years.

The anatomical composition of scar tissue is the same which characterizes the fibrous impediments of my cases, and if the former can yield to persistent extension, the latter likewise will.

In preferring this method in any given case, I should advise to remove all and every muscular resistance by previous division. There are some authors, among whom Barwell occupies a prominent position, who oppose, for several reasons, this operation as unnecessary and objectionable. According to their reasoning the contracted muscles are in a state of clonic spasm, which will yield to persistent extension,

I have already exposed the fallacy of this opinion in another place, and proven by theory and practice the inefficiency of gradual extension, in as far as muscular contraction is concerned. But if it is impossible to extend them in more recent cases of joint disease, it is surely impracticable in protracted cases, and after the muscular tissue has been displaced by structural elements devoid of expansibility.

From my experience, gradual extension is absolutely dangerous, being apt to produce fearful and insufferable pain, and reproduce the original disease of the joint.

I am indeed astonished at the self-assurance with which Mr. Barwell claims invariable success. The field of his clinical observation must indeed have been very limited when he never met with cases in which gradual extension gave rise to serious troubles. All his arguments against the division of contracted muscles are, moreover, of a very insignificant nature. Mr. Barwell says the divided tendons of muscles do not readily unite. I deny this assertion as entirely unfounded; if the division is carefully preformed and the theca of the tendon respected, it will unite readily and form firm and reliable connection. My experience has been rather the other way, and therefore I have been occasionally compelled to re-divide the same structures.

Next, it is asserted that the divided muscle is so much shortened by the operation as to lose entirely its physiological office. However, how can the muscle lose a function which it does not possess? The division of muscles which had not entirely lost their physiological expansibility, does not permanently destroy it; I have had plenty of proofs to that effect in my practice.

The fact is that most of these muscles are worthless before and after their division, because most patients content themselves with a straight and useful extremity, though the mobility of the interested joint may have been partially or totally lost.

The inefficiency of gradual extension has led to the adoption of a more efficacious and practicable method for the treatment of fibrous anchylosis, known as foreible extension or brisement forcé.

Some twenty years ago, Amussat called the attention of the Royal Academy of Medicine to the method of M. Louvrier, and caused a committee to be appointed to investigate its startling results. The report thus elicited from competent surgical judges, presented, that up to that time Louvrier had treated twenty-three cases of contractions of the knee joint; that he employed a rather clumsy and complicated apparatus by means of which he forcibly broke down all resistance and straightened the respective limbs; that the results were but imperfect; that no good form was obtained; that a few had been straightened perfectly and remained so; that in some, posterior subluxation of the tibia had been produced and that three patients had died from operative shock, purulent infiltration and pyæmia. Louvrier himself admitted, with laudable candour, the short-comings of his method.

In spite of the enthusiasm on the part of the younger members of the profession for the new method, it met with but a cold reception among the contemporaneous surgeons of note. But a low therapeutical estimate was put upon it, and at best it was pronounced a cruel measure worse than the trouble it was designed to relieve. Fergusson and Stromeyer were its most determined opponents and disposed of it in not very flattering terms.

If I do not mistake, Dieffenbach was the only surgeon of distinction who not only vindicated brisement forcé but had the courage to adopt it against all clamour. He, however, modified the proceeding by substituting the hand for the surgical rack of Louvrier, and included tenotomy and myotomy as preparatory measures.

In a comparatively short time this distinguished surgeon had operated upon 200 patients, and reports the general result in his work on operative surgery, to the effect that he lost but two patients from suppuration and pyæmia; amputation was required in one; in some the limb was improved to a moderate degree, in others anchylosis became re-established. A large proportion of the patients were materially benefited.

Some advancement has this method of treatment received at the hands of Professor Bernhard Langenbeck, of Berlin, but it should be remembered that he had a most powerful aid in chloroform. In his inaugural dissertation, on entering upon his professorship,\* he pronounces gradual extension ineffective; the division of the contracted muscles, as perform-

<sup>\*</sup>Commentatio de contractura et anchylosi genu nova methodus violentiæ ex tensionis ope curandis. Berolini, 1850.

ed by Dieffenbach, as superfluous, and even dangerous, by inviting the entrance of air and thus giving rise to suppuration. Louvrier's method is, according to him, too uncertain, and its results removed from the control of the surgeon. The technicism of Langenbeck conforms, in most points, with those of Dieffenbach. The results which Langenbeck attained up to 1853, are compiled in the inaugural dissertation of Philipp Frank.\*

In carefully analyzing the results of Louvrier, Dieffenbach, and Langenbeck, and in comparing them with each other, it cannot be denied that Dieffenbach's were superior to Louvrier, and Langenbeck's better than his predecessors. But all of them are certainly imperfect, and by no means satisfactory. Louvrier caused, in three cases, considerable injuries to the knee-joint, and consequently lost them. Of what nature these injuries were I have not learned, nor the reason why they happened in three cases, and not in the remainder. Very likely that they were cases of true anchylosis, and that he fractured the bones, or caused diastasis of the epiphysis, or tore vessels or nerves. The subluxation of the tibia, in almost all the cases of Louvrier, must have been a great detriment to the final result of his treatment. For, in the first place, the posterior projection of the tibia must have, by necessity, compressed the popliteal nerves and vessels, thus materially interfering with the circulation and innervation of the leg. Again, the gastrocnemius was evidently put on the stretch, and the heel prevented from reaching the ground. Moreover, the contracted flexor muscles were so much irritated as to cause serious subsequent troubles. Dieffenbach's method was, therefore, a material improvement. In using manual force alone, he protected himself against the error of meddling with cases of true anchylosis, not amenable to brisement force, and by dividing the contracted muscles he relieved the patient from the serious consequences appertaining to undue extension. Lastly, in breaking the anchylosis up, by alternate flexion and extension, he obviated subluxations of the tibia. The real merits of Louvrier or Dieffenbach for the advancement of this province of orthopædic surgery are, in my humble judgment, obviously greater than those of Langenbeck. The method of the latter is essentially that of Diffenbach deprived of the benefit of tenotomy, but favoured by chloroform.

I have the most unreserved appreciation of the great talents and diligence of Langenbeck, but I appreciate truth and clinical facts still higher. About 600 cases of affection, contraction, and anchylosis of the knee-joint have given me ample opportunity for most thorough clinical observations,

<sup>•</sup> De contractura et anchylosi articulationis genu et coxæ; Berolini, 1852.

and entitles me to a participation in the settlement of the important question which is still being discussed by the highest scientific tribunals of Europe, before which Langenbeck maintains his former position.

On the feasibility of brisement forcé we all agree. Its superiority over progressive extension can no more be questioned, and its former opponents have been effectually silenced by the overwhelming results of that practice. It has also been clearly demonstrated that the hand is a better mechanical adjuster than the lever and the screw. But for the introduction of anæsthetics, more especially of chloroform, the operation would have been of little practical value. The pain attending it is severe enough to terrify the boldest patient and surgeon. The subsequent sufferings it entails, and the uncertainty of its success, would have driven it again into oblivion. Chloroform and tenotomy assure the future of brisement forcé. The former renders it perfectly painless, the latter protects against consecutive effects, which are worse than anchylosis and the contraction of the knee-joint together. I do not dispute that in some instances, simple extension will suffice to overcome, permanently, a moderate reflex contraction. Further, I have observed that a weight of a few pounds fastened to the extremity for a few days will have the same effect. But a high degree of muscular contraction can be subdued by division alone. The name of Langenbeck was sufficient inducement for to follow his directions..

I have tried his method in quite a number of cases, and succeeded in most of them, in extending the extremity, but as soon as the anæsthesia subsided, the muscles commenced contracting again, or, if prevented therefrom by mechanical restraint, an intense suffering ensued. There are but few maladies that cause so intense agony, and prostrate the constitution in so short a time, as the persistent extension of contracted muscles. I remember, among several cases, particularly one of a little boy. who was brought on from Montgomery, Alabama, with a contraction of the knee-joint. The original disease, synovitis, had subsided two years before. The joint was quite well, and there was no pain felt either on motion or pressure. Moreover, the mobility of the joint was not materially disturbed beyond the impediment of the contracted flexors Under chloroform only the biceps muscle felt tense, and I divided it. I then easily succeeded in extending the leg, and in securing its position in a straight splint. The anæsthesia had scarcely passed off, when the patient began crying loudly, and very soon the articulation became tender and distended. Inflammatory fever set in, with a pulse of 150. The strongest opiates, the most active and persistent general and local antiphlogistics made no impression whatsoever. The paroxysmal pains

suggested to my mind their specific character. On relieving the limb from its restraint, it immediately bent. This was another indication in the same direction, and yet the tension of the remaining undivided flexor muscles was so trifling as scarcely to deserve notice. On the sixth day after the operation, the joint was greatly distended and fluctuating, without the slightest sign of amendment. At that juncture I again placed the patient under chloroform, when again all muscular tension vanished, and I had to wait for the subsidence of anæsthesia in order to mark the tendons to be divided. What sedatives and the whole antiphlogistic apparatus failed to effect, tenotomy did. Rest immediately ensued therefrom. From that moment improvement commenced, and eventuated in perfect recovery. I could adduce several instances of the same striking and conclusive nature. But one will suffice to illustrate the importance of tenotomy in the treatment of the deformity under consideration. I shall now proceed to delineate the plan which I have adopted, and which I have reason to believe is the mildest, the safest, and certainly the most effective. First, be certain in the diagnosis. Fibrous anchylosis may be easily recognized, for there always remains a moderate degree of mobility at the joint; even osteophytes are not incompatible with mobility, more especially when they arise from one bone, and do not firmly connect with the other. But if both bones are united by osteophytes, there is nothing left of mobility, and in as far as the latter is concerned, there is no symptomatic difference between a true anchylosis and that caused by osteophytes. The previous history of the case alone can give you a clue as to the nature of the anchylosis. From the preceding remarks you may be led to expect osteophytes from previous periostitis, and true bony union from a more structural affection of the joint itself. Supposing, then, that we had either a fibrous or an osteophytic anchylosis, with marked contractions of the flexor muscles, I would suggest, first of all, to divide all the contracted muscles. It will be better to do this six or eight days previous to the performance of the brisement forcé. By that time the wounds have firmly closed. No air can enter and give rise to suppuration, and you obviate at least one of the objections raised by the opponents of tenotomy. It is, of course, indifferent whether you use chloroform on that occasion, since but little pain accrues from the operation. Nor do I deem it necessary to give you special advice as to the flexor muscles of the leg, since by extension you can raise them from the adjacent parts, and divide them successively as they present themselves. The division of the tendon of the biceps deserves special mention. The external popliteal or peroneal nerve is in such close approximation to the internal margin of the tendon as to be easily cut through. If this be the ease, paralysis of the abductor muscles of the foot and talipes varus would inevitably follow. In order to avoid this nerve, you have to divide the tendon either from outside by dead pressure with a tenotome not too sharp, or by inserting it close to the inner margin of the tendon, and give the edge an outward direction. With all precaution imaginable, I have nevertheless met with this accident in four cases. Yet I am happy to say that the paralysis arising from the inadvertant division of the nervus peronæus, did not exceed six months, the nerve having probably re-united, and thus re-established its full innervation.

About eighteen months ago, I took charge of a young man, who had sustained a serious accident; his right knee-joint having been opened at its outer aspect by a large lacerated wound. The tendon of the biceps as well as the peronæus nerve were demolished for about an inch. The patient has never recovered the action of that nerve.

But even if there be no trace of mobility in the joint, as in complete ostcoyhytes, tenotomy should precede brisement forcé for reasons requiring no further explanation.

In order to perform brisement forcé the patient should be fully under the influence of chloroform. He should be placed on his face, but at the same time due attention paid to respiration, for at that degree of anæsthesia, respiration is very feeble and in the main diaphragmatic. The slightest impediment may entirely arrest it. As soon as the patient is thus prepared, you have the thigh properly fixed by an assistant, and then taking hold of the leg, bend it with a sudden jerk, and then extend it; and so continue to alternate between flexion and extension, until the articulation is quite free.

If there be any rotation of the tibia, it will be advisable to amend that position by re-twisting it in the opposite direction. This done, bandage the extremity carefully with a roller, surround the knee-joint with strips of stout adhesive plaster, and fasten either the extremity in a straight iron splint, such as I have before shown, or adjust the extension with the pulley and weight, as before described. In order to correct the lateral position of the limb, Professor Robert places side cushions inside of the splints before fastening the extremity.

By this plan I have obtained most satisfactory results, and have never had any trouble in producing a speedy and steady recovery of numerous patients. It was never followed by inflammation or neuralgia which other surgeons have complanied of; nor did the contraction return, provided all the contracted muscles had been successfully divided. If any of those symptoms should set in, rest assured that the tenotomy is not complete. The earlier you perfect it the better it is for your patient. It is need-

less to contend against them by antiphlogistics and sedatives; you will effect nothing. Tenotomy is the only remedy.

Brisement forcé is both in appearance and reality a powerful remedy. It overcomes, by main force, all resistance; it ruptures the fibrous adhesions of the joint and unyielding tissues, and can certainly do great mischief if indiscreetly performed. But in using the necessary precautions with physical power, nothing is to be apprehended therefrom. In the large number of my cases I have had but four accidents: one of them was inevitable, and certainly could not be foreseen. The case refers to a youth of about sixteen years. He was tall, slender, and evidently of feeble constitution. Having been employed in a manufactory in which he had to tread a wheel, he had thus acquired an inflammation of his knee-joint, which terminated in a deformity. His leg was bent at an angle of 105°, (Fig. 13), but permitted mobility within an angle of 30°



eyond which there was resistance on the part of the contracted biceps and other articular impediments. The patella was moderately moveable. After having divided the tendon of the biceps, I increased the flexion of the limb by a comparatively gentle effort, when, to my surprise, the resistance suddenly yielded.

A few days afterward a slough appeared in the popliteal space, and the suppuration became so profuse as to render amputation imperative. It was then found that the epiphysis of the femur had yielded, whereas the articular adhesions had remained unbroken. (Fig. 14.) The disproportionate strength of the articular adhesion, over the union between the lower extremity of the femur to its shaft, was the proximate cause of the accident, and certainly could not have been anticipated. A large proportion of my patients have been children in whom the same condition of the femur existed, but with the exception of a few cases, I have met with no accident whatever. In reference to the case just related, I candidly confess that I had not the remotest idea that such an accident would hap pen at the age of the patient, nor did I or any of my able assistants rea-

lize its occurrence. It was in fact the first mishap of this kind, though it has not been the last. The next case happened with a lad from Indiana, aged 17 years. His appearance was equally delicate, but more from rapid growth than any other cause, for the affection of his knee-joint had



(Fig. 14. See page 256.)

subsided some years previously. I performed the operation at the office of my esteemed friend Dr. Gaston at Indianapolis and in the presence of the prominent practitioners of that city. They all can bear witness that I proceeded with great care and precaution, and employed no undue violence.

Nevertheless a diastasis of the lower epiphysis of the femur took place, but no serious consequences followed, beyond the delay of treatment, which has since been resumed.

The other two accidents of this description happened with children; one of the cases I have already adverted to.

These accidents are indeed of no great consequence, provided they are promptly recognized and attended to. The limb must be brought back into the former position, and this position must be secured by bandages impregnated with plaster of paris; in six or eight weeks the union is perfect, and the treatment may then be renewed without further hazard.

It seems to me that these accidents are likely to happen in cases where the intra-articular adhesions are rather tough, and the connections between the epiphysis and shaft of the femur somewhat infirm. The latter may be expected in debilitated and overgrown individuals, and, in such, more than usual precaution is needed to obviate mishaps of this description.

(To be continued.)

Case of Biliary Calculi escaping through the parieties of the Abdomen. Recovery. By E. D. Worthington, A.M., M.D.

I regret that never having formed the habit of keeping a Medical Note
R VOL. IV.

Book, I am unable to give more than a mere outline of the following rather extraordinary case.

On the 24th of March last, I was called, for the first time, to see a widow lady aged 59. She had enjoyed uninterrupted good health, until about ten years ago. Since that time she had suffered once or twice a year, for a day or two at a time, from what she called "Bilious attacks." In the intermediate time, her general health was good, and for the last two years having no return of her old ailment, she considered herself, as she expressed it, "a well woman." When I saw her, she had a "Bilious attack," great restlessness, acute pain at the epigastrium and right hypochondrium, thirst, and incessant attempts at vomiting, bringing up from the first only what she had swallowed. Pulse unaffected.

I gave her a good dose of calomel dry on the tongue, and ordered turpentine fomentations. When I saw her again she was better, the bowels had been freely moved, but there was still some irritability of the stomach, and tenderness on pressure. For the first I ordered effervescing draughts, and for the second, a large blister.

She continued to improve daily, and at the end of a week was up and going about the house.

She sent for me again on the 15th of April, and told me that though she was up she was not well, that she had a good deal of dull burning pain about her stomach and side. There was no tenderness on pressure over the liver, but I discovered a well defined enlargement extending from below the umbilicus to near the lower border of the ribs, on the right side. It could be grasped in the hand, and felt like a large solid tumour, firm and deep in its attachments, and on pressure, caused a sensation more of faintness than of acute pain. No redness whatever externally.

Strange to say my patient was hardly aware of the existence of this mysterious enlargement. Believing that the unusual hardness was merely superficial, and caused in the first place by the blister, I prescribed internally, iodide of potassium in infusion of Calumbo; a Dovers powder with Hydrarg c Creta at bed time; and painted the surface once a day with Tincture of Iodine.

At the end of a week the tumour was somewhat softer, more superficial, less firm in its deep seated attachment, the skin distinctly red, and the whole swelling more painful on pressure.

It then became evident that the case was likely to terminate in abscess, opening externally, and of course I did everything I could to bring about a "consummation so devoutly to be wished."

Dr. Gilbert, of Hatley, being in Sherbrooke early in May, I requested him to see the case with me. Even then there was no yellowness of the

skin, no rigors, or other constitutional symptoms to lead any one to the supposition that the abscess was connected with the liver. Some days afterwards the abscess was opened, when it discharged about 20 ounces of greenish coloured, excessively feetid pus.

On the fourth day, the nurse, on changing the dressings saw that the discharge had suddenly ceased, and that the opening was plugged up by some hard, brown looking substance. With a woman's curiosity she took a pin and picked this out, when it proved to be a large Biliary Calculus. Two more escaped within twenty-four hours. The discharge lessened day by day, and the opening soon closed up. She improved rapidly, and is now quite well. I saw her to-day. She keeps the gall stones, as a great treasure, and is rather proud of shewing them to her friends.

In November, 1855, I saw a case that presented appearances similar to those I have already described, except that there was yellowness of the skin, and undoubted symptoms of obstruction of the ducts. I was a young man at the time, and asked Dr. Johnstone to see the case with me. He would not recommend the lancet, and even if he had, the relatives would not allow any surgical interference, as the patient was a very old woman.

After death I could only get permission to examine the abscess. There was a very thin covering of tissue confining its contents. Beside pus it contained, if I remember, 93 gall stones, at any rate enough to fill a common saucer.

I have frequently met with cases were gall stones have been passed by the bowels, and in such cases have seen greater benefits result from the free, long continued use of nitric acld, than from the use of alkalies as a solvent.

Sherbrooke, Nov. 1867.

Case of Stricture of the Urethra treated by External Division. Under care of G. E. Fenwick, M.D., Professor of Clinical Surgery, McGill University, Reported by George Ross, A.M., M.D., House Apothecary, Montreal General Hospital.

Andrew Melville, aged 46, was admitted into the Montreal General Hospital on the 21st October, 1867, suffering from a stricture of old standing.

He states that he has never had but one attack of gonorrhoa, and that occurred 27 years ago—it was pretty severe and he was under treatment for over a month—some sealding in voiding urine remained for a long time after apparent cure. About seven years ago he first hoticed a diminution in the size of the stream of urine, together with the other symp-

toms of commencing stricture. Three years since had almost complete retention, which was relieved by the passage of a small catheter. Had no further trouble with it until just twelve months ago when he was treated in this hospital for extensive urinary infiltration which had followed almost complete occlusion of the urethra; a small perineal fistula has always remained since this time. A few days before admission noticed some swelling in the perineum, accompanied by severe scalding.

When admitted, the perineum was found swollen and hard, as was also the scrotum, and he complained of almost total inability to pass water, together with much pain on making the attempt. An attempt was now made by the House Surgeon to pass a catheter, but without success, owing to the ædematous condition of the parts around the urethra and the existence of a long false passage leading up between the bladder and rectum. He was put to bed and hot stupes applied with relief.

Considering therefore the impermeable nature of the stricture and the constant danger of repeated attacks of urinary infiltration, it was determined to perform perineal section.

Accordingly on the 15th Nov., the patient having been put under the influence of chloroform, a No. 10 catheter was introduced into the urethra as far as the seat of the stricture, and upon this an incision about  $1\frac{1}{2}$  inch in length was made. When the extremity of the catheter was thus exposed, search had to be made for the entrance of the urethra, and in this part of the operation considerable difficulty was experienced, but at length a small probe having been got through the stricture, this was freely divided upon it for the distance of about  $\frac{3}{4}$  of an inch. The large catheter was then easily passed into the bladder and retained by tapes.

The operation was followed by two or three pretty severe rigors, and on the fifth day by the formation of an abscess in the cellular tissue of the scrotum communicating with the urethra, but which when opened soon healed up.

On the third day the catheter was removed and re-introduced the next day and again retained for 48 hours, at the end of which time it was with, drawn and afterwards only passed in at first every day and subsequently every second day.

The wound presented a uniformly healthy appearance and at the time of discharge is so completely healed that the entire stream of water passes freely by the natural passage.

Discharged cured, Nov. 30th, with an injunction to keep passing a No. 10 catheter himself twice a week for at least 12 months.

#### LONDON CORRESPONDENCE.

The meeting of the British Association for the Advancement of Science, which was held this year in September, at Dundee, was one of the most successful that has occurred for many years past. Indeed the people of Dundee made up their minds beforehand that nothing should be wanting on their part to render the meeting a pleasant one to all who should attend it. Genuine warm hearted hospitality abounded, and the town was so crowded by the influx of visitors, that very many were accommodated in private houses. What struck us very forcibly at this meeting, was the amount of work done in all branches of Science by the members of our profession, of the 3 professions of Law, Divinity and Physic, the latter only numbers amongst its followers the "Bees of Science" if the expression may be allowed, for industry, labour, research, a spirit of earnest inquiry, and indomitable perseverance—necessarily engendered by the habits of training for study—are the peculiar characteristics of the medical philosopher. The subjects interesting to your medical readers were so numerous, that we shall only glance at some of the more important and strikingly new.

A variety of papers were read, more or less dwelling upon the Antiquity of Man. This subject has occupied the attention of scientific men for some time, and year by year, evidence is accumulating, to show that man existed upon our planet at a time very far beyond that given in the Mosaic Record. And if the interpretation of the age of the deposits in which the remains of man or the work of his hands are found co-existing with the remains of numerous extinct animals, be correct, then we must consider man to have been created after the image of his Maker from 20,000 to 50,000 or even many more years ago. This need not surprise us in the least, for periods of time, geologically speaking, carry the mind back, for millions of years, and 50,000 or 100,000 years is a comparatively short period in the history of our planet. In a Report upon the exploration of Kent's Cavern, Torquay, by Mr Pengelly, read before the geological section, he stated that amongst other things were found a tooth, a portion of an upper jaw, with teeth, of a man in the cavern, associated with the bones of many extinct animals. Sir Charles Lyell believed it would be of the greatest importance to continue the researches into this cavern, and that it would take a great many years before they were properly exhausted. In the gravel beds of the Cavern there had now been found the remains of the mammoth, by which they proved the co-existence of man, with that of not less than three different species of

elephants in Europe. They had most unquestionable proof, Sir Charles remarked, that three different species of elephants existed when it was inhabited by that race of men who made the flint hatchets and the bone instruments which had been found in such large numbers in the cavern.

The interest of the subject appears to be increasing year by year, and a mass of valuable evidence is gradually accumulating which philosophers will turn to account by and bye.

Other papers were read upon the various races of man, and on colour of the skin as a test of race. People are beginning to believe that the black and white races of mankind sprang from different creations, and the old theory of the alteration of colour by climate is becoming exploded. An excellent paper was read by Sir John Lubbock on the origin of Civilization and the Early Condition of Man.

Dr. Hughes Bennett, of Edinburgh, read a paper upon the Influence of Mercurials on the Bile secreted by the Liver, in which he gave the results of a number of experiments upon dogs. They consisted of four series of experiments relating to the amount of bile secreted with and without mercury. In each case a biliary fistula was formed, the weight of the animal was ascertained, the amount of food given, and the secretion of bile for 24 hours measured, and its solids and salts ascertained. The greatest variations were found to exist in the amount of bile secreted daily, independently of the amount of food or other obvious cause. The same fact was observed when mercury was given. No conclusions were drawn at present from these experiments, which are to be continued by a regular committee organised for the purpose.

In a paper by Dr. Richardson, on the coagulation of the blood, he aban doned his ammonia theory, and his present views are, that the process of coagulation in albuminous and fibrinous fluids is due to a communication of caloric force to them, and to a physical or molecular change, determined by the condition of their constituent water. Whether this theory will be more durable than his former one, physiologists will determine.

The antiseptic properties of the sulphites was the subject of a paper by Dr. Polli of Milan. The author found the sulphites of lime, hyposulphite of magnesia, sulphite of magnesia, sulphite of soda, and granulated sulphites, to possess all the properties of sulphurous acid, with the advantage that their action was more uniform, certain, and constant. Both on animals, and himself, he found that large doses could be given without the least danger or inconvenience. Decomposition in animals is arrested by their use, and cases of blood poisoning are rapidly cured by them; both are attributed to the antiseptic properties these salts possess.

Of other papers of interest were the following, which are now being published in the various medical and scientific journals:—

Preparation of the Finest Bile Ducts. Exhibited and explained by Professor Turner and Dr. M. Foster.

The influence of Air on Vital action as tested by the Air Pump. By Dr. John Davy.

Certain effects of the concentrated Solar Rays upon the tissues of Living Animals immersed in water. By Dr. G. Robinson.

Food of the Aborigines of Australia. By Mr. John Crawford.

Experiments on the Luminosity of Phosphorus. By Dr. J. Moffat.

On the Decay of Stone, By Mr. J. Spiller.

The Comparison of Limbs deduced by the Torsion of the Humerus. By Professor Martins of Montpellier.

The adaptation of the Structure of the Shell of the Bird's Egg to the function of Respiration. By Dr. Ogilvie.

A contribution to the Anatomy of the Pilot whale. By Professor Turner. Vocal and other Influences upon Mankind of Pendency of the Epiglottis. By Sir Duncan Gibb.

Experiments with Poisons, &c, on young Salmon. By Dr. McIntosh.

On Protogon in relation to the Molecular Theory of organisation. By Professor Bennett.

Effects produced by applying extreme cold to certain parts of the nervous system. By Dr. Richardson.

On the prevalence of Spedalske or Leprosy in the Kingdom of Norway. By Mr. Henry Ker Porter.

An abnormal leaf of Prunus lauro-cerasus. By Professor Dickson.

Observations with the spectroscope on Animal colouring Matters. By Mr. Ray Lankester.

Microscopical Preparations of the Cochlea, of the Retina, and of Teeth of Fossil Fishes. By Professor Allen Thompson.

The Epithelium of the cornea of the ox in relation to the growth of stratified epithelium. On some Points connected with the Joints and Ligaments of the Hand. By Professor Cleland.

Report on Methyl compounds. By Dr. Richardson.

On Birds, their Nests and Plumage, or the relation between sexual differences of colour and the mode of nidification in birds. By Mr. A. R. Wallace.

Observations on the habits of flying fish. On Trichodesmium or Sea Dust. By Dr. Collingwood.

On the presence of Quinine and other Alkaloids in the animal Economy-By Dr. Wentworth Scott.

On the conservation of Forests in our Colonies. By Dr. Lauder Lindsay. On Polliniferous ovules in a Rose. By Dr. Maxwell T. Masters.

Report of the Lunar Committee. By Mr. Birt.

Such are a few of the chief papers, which will give your readers an idea of the variety of subjects brought before the association. Anything positively Medical or Pathological is rigidly excluded. Mathematics and Physics, Chemistry, Geology, Biology (taking in Zoology, Botany, Anatomy and Physiology), Geography and Ethnology, Economic Science and Statistics, and Mechanical Science, are all legitimate subjects for consideration, and contributions from all quarters of the world are welcome. If any Canadian philosopher is desirous of contributing anything to the British Association next year at Norwich, we will gladly be the means of carrying out his wishes. Short communications, with original facts, are welcomed.

Yesterday (Nov. 20th.) we were present at University College Hospital, and witnessed the Removal of a large Osteo Sarcoma of the Lower Jaw by Mr. Christopher Heath. The theatre was crowded to suffocation. The patient was a man aged 32, in whom an enlargement of the lower jaw commenced eight years ago, after the extraction of a tooth-It remained more or less stationary up to two years ago, when he fell from a horse and injured himself; from that time it grew pretty rapidly, and now was as big as an adult's head. The man, who was from Leicester, had been seen by several surgeons, all of whom refused to operate. Mr. Heath, who has already made himself famous for operations on the jaws, considered it a suitable case for surgical interference, and the man was admitted under his care. It so encroached on the mouth, that the tongue could not be seen, and there was much difficulty in feeding himself. The patient presented a most extraordinary appearance from the immense size of the tumour, which had in front of it a fungoid looking mass, which was not malignant disease, but the result of some quack treatment he had undergone. Chloroform was given at the nose, the patient sitting in a chair with his legs tied to it. When under the influ ence of the anesthetic, Mr. Heath made an incision on either side of the central fungoid mass, cutting through the lip and dissected off the skin-He sawed through the angle of the jaw on the left side where it was com. paratively free from disease, and then carefully detached all the surrounding structures, until he reached the articulation on the right side, when with a little care he succeeded in getting away the cordyle. The tongue early in the operation was transfixed with thick cord, and was held out by Sir Henry Thompson. Comparatively little bleeding ensued, but several small vessels were tied. The lip and chin were brought together by pins, and the flaps by silver wire sutures; and it was astonishing to witness the improvement in the man's features. The great tumour was the size of an adult's head, and weighed 41 lbs.; it was not malignant, and for the

most part was bony. Although the patient was weak, chiefly from the want of food, he seemed to be in good condition after the operation, and there is no reason why a favourable issue should not ensue, of course excepting the usual surgical accidents. Such operations as this were rife in Liston's time, but we believe that Liston never removed one so large, though Syme did at Edinburgh.

In a review of the "original relation of the voyage of Jacques Cartier to Canada in 1534," in the Athenæum, mention is made that it contains an account by Mr. Rameé of Cartier's house near St. Malo, which the reviewer regrets to find is about to be pulled down, and so will every true hearted Canadian. It appears that the house was, a few years ago, in a most ruinous condition, and no steps were taken to arrest the process of decay, and consequently it has become too dilapidated to be restored. The writer in the Athenæum (Oct. 26th.) says: "This is to be lamented, for besides being a very picturesque building and an excellent type

Jacques Cartier should not have been allowed to perish."

No doubt it would not have been, if made known in Canada, where his memory is as much respected as is Shakespeare's in this country; unfortunately St. Malo is far away from Canada, but yet much might be done even at this eleventh hour to save it to posterity.

of the old French manoir, the house and home of so famous a man as

London, Nov. 21st 1867.

#### REPLY TO "LOOSE STATEMENTS."

To the Editors of the Canada Medical Journal.

Gentlemen.—Were it not that I have a tendency to act on the Horatian maxim nil mirari, I could scarcely have failed to be astonished at an article which appeared in pages 236-7 of your Journal for the current month. If I regret, as I do, the appearance of that article in a Canadian Journal, devoted exclusively to the advancement of Medical Science and to the promotion of harmony among its members, it is certainly not on my own account; but simply because of the effect which may be produced on unprejudiced professional readers, when, in the exercise of that justice which is due to myself, I lay its antecedents before them.

Having been present at the Congrès Medical which was held in Paris in August last, I had a slight share in, for me, an interesting discussion which took place on "alimentation as affecting different races." I stated in the course of my remarks that the French habitants of Lower Canada were, as regards strength and muscular energy, superior to the cor-

responding class of the population in France, so that, assuming the absence of deterioration on the part of the latter within the last century and a half, the Franco-Canadians had during that period made a long stride in advance in physical progress; and whilst, in accounting for the fact—a fact which I had abundant proof to substantiate—I was inclined to attribute it largely to the great salubrity of our Canadian climate, I suggested that alimentation might have much to do with it-contrasting the more abundant supply of animal food enjoyed by the Canadians with, what appeared to me, on my two visits to France, the lenten commons of their ancestors. I stated that in most French Canadian families, where it could be afforded, meat was used at every meal. I specially noticed the case of the Canadian lumbermen on the Ottawa and St. Lawrence and their tributaries, and of the voyageur on the Hudson's Bay coast, who, when out in the forest, or on fatiguing journeys and exposed to cold, would consume from two to three pounds of pork in a day. I further stated that in comparing the descendants of Canadian settlers from the British islands with the corresponding classes of the population at home, I had observed no such difference in favour of the Canadian. The British Canadian, however, I remarked, was, in the majority of cases, not more than the immediate descendant - the son, or at most the grandson of his immigrating ancestor, so that whatever might be the ultimate results of his transplantation to our soil, the law of acclimatization had not had time, hitherto, to exhibit its effects upon him, comparatively with his fellow-subject of French descent, on whom it had been operating for a series of generations.

These remarks of mine, made in French, in the presence of an immense assemblage of scientific men from all parts of the world, most of whom, I well knew, were quite equal to a correction of statements of a "loose" character, (indeed I am so bold as to think that some of them might have possessed "experience" equal, almost, to that claimed by the writer of "loose statements") were somewhat inaccurately reported in a Parisian Medical Journal, and from its columns they were transferred, sometimes with augmented inaccuracy as they were retranslated into English, to various professional periodicals both in Great Britain, and in the United States. Having seen them commented on in a daily newspaper of this city, the Montreal Telegraph, I pointed out some of the inaccuracies in a letter to the Editor, which was courteously acknowledged and inserted in his issue of the 19th ult., just one week before the appearance of the Medical Journal. Moreover I pointed them out specially to the Senior Editor of the Canada Medical Journal, stating and reiterating to him in the course of three several conver-

sations, two of these in the presence of scientific friends, the true tenor of my observations, as they are given above. This I did in order that the "Canada Medical Journal" at least might have no excuse for, and I certainly acquitted it of any desire of, misrepresenting my opinions; and if its readers will now take the trouble of recurring to its article on page 236, they will have an edifying opportunity of judging how much fairness it can occasionally display. They will find that its senior editor, perfectly cognizant of the real facts, has had the courage to publish and to comment upon, an erroneous report of my language, just as if he had no reason for supposing that it was not genuine, and to make me draw comparisons, when I had drawn, and he knew I had drawn, no comparison whatever. Leaving, for a short season, the masticating quality of our voyageurs and shanty-men to take care of itself, I shall simply ask, whether, or not, common candour towards even a professional friend and neighbour may not be one of the duties of an editor; and whether or not, in comments of just forty lines in the aggregate, intended, no doubt, to be very scientific, courtesy should not have prompted the choice of language more polite and civil than "statement of so extraordinary a nature," "exaggeration of a very serious nature," "loose statements," "singularly untruthful," &c. These words, which one may explain, but no one justify, are the editor's, not mine.

Your obedt. servant,

WM. H. HINGSTON.

Beaver Hall Hill, Montreal, December, 1867.

P. S. As I was the accredited representative of the College of Physicians and Surgeons of Lower Canada, when in France, on the occasion referred to, it will be my duty, as it will also be my pleasure, to furnish to it a rapport of the Congrès, and of my share therein.

REMARKS.—We cheerfully give insertion to the foregoing reply of Dr. Hingston to an article which appeared in the last number of the Journal, and we are rejoiced to have an opportunity in this Canadian Journal of announcing to the assembled savants who met at Paris in August last, that what Dr. Hingston intended to say at their meeting carries quite a different meaning to the hashed up and garbled statements which must have appeared in the "Gazette des Hopitaux," or some other Parisian journal, if we may judge from the reports of those statements which have found their way into papers, both Medical and secular, of Great Britain, the United States, and Canada. We spoke to Dr. Hingston about his remarks

chiefly on the pork-eating propensities of the French Canadian, and he insisted that his statements were well founded and correct, and even went so far as to declare that he could himself consume 3lbs of pork in a day. If a scientific man (as we believe Dr. Hingston to be) ventures statements in the Munchausen style, or allows them, with his authority, to go uncontradicted, he can hardly wonder that a journal, which he himself regards as exclusively devoted to science, should notice spreadeagleism of the most absurd description. It is more than likely, that the scientific men who heard Dr. Hingston, and regarded him as a fair specimen of the British Canadian, supposed that men of the French race who inhabit these northern wilds, and whom they understood the Doctor to describe as larger and better men physically than those of British origin, were a species of ogre beside whom a Patagonian would be a baby; hence it is not at all to be wondered at their swallowing, without comment, the three-pound of pork theory.

The letter referred to by Dr. Hingston, which appeared in the "Evening Telegraph" of the 19th ult., was published after our article had gone to press, and had reference to an extract copied from the "British Medical Journal," wherein, as we stated, Dr. Hingston is made to draw a singularly untruthful comparison between the French Canadians and those of British origin, as regards their vigour and general physique. In writing that article, and specially the part of it copied above, we did not imply that Dr. Hingston made the untruthful statement. We are fully alive to the fact, that John Bull is so fond of his roast-beef and plum-pudding in London, that he cares very little about his lenten, or pork eating neighbours, or the effect of such alimentation on their general development; but we desire, if possible, to put him right on the subject as regards us Canadians.

We trust Dr. Hingston is not drawing on his imagination in the statement which he furnishes above, of what he did say before the Paris Conference; certainly the two statements are singularly at variance.

In noticing the subject, we held in mind the singular and ridiculous assertion, that the French Canadians habitually consumed two or three pounds of pork per day. It is remarkable, in Dr. Hingston's reply, this point is most studiously avoided, except where reference is made to "most French Canadian families, where it could be afforded, meat was used at every meal;" also, the Canadian lumbermen, and the voyageur on the Hudson's Bay coast. With regard to our drawing unnecessary, and, to say the least, ungracious comparisons we cannot plead guilty. Is it or is it not a matter of fact? or is the Doctor fearful of perilling his popularity, or hazarding ours, by holding us up as making an ungracious attack on the size and general physique of the French Canadian.—Eds.

#### REVIEWS AND NOTICES OF BOOKS.

The Practice of Medicine and Surgery applied to the Diseases and Accidents, incident to Women. By WILLIAM H. BYFORD, A.M., M.D., Professor of Obstetrics in the Chicago Medical College. Second Edition, enlarged. Philadelphia: Lindsay & Blakiston, 1867. Montreal: Dawson Brothers.

Dr. Byford is most certainly a practical observer of no ordinary talent. and has produced a volume which does him infinite credit. Female diseases are constantly being brought under the notice of the Physician. many of them at times troublesome and annoying, and after reading carefully many chapters in Dr. Byford's work it affords us much pleasure in testifying to the thoroughly practical character which pervades every page. Its appreciation by the profession is best illustrated when we mention the fact that it was in September, 1865, when the first edition was published, and the preface of the second edition is dated October, 1867. Such a rapid exhaustion of the first edition speaks volumes for the estimation in which it is held. Under the head " causes of Mammary Inflammation" Dr. Byford speaks pretty plainly as regards some of the causes which give rise to this exceedingly troublesome and annoying inflammation. He says, "external causes may give origin to similar sorts of inflammation, as bruises from blows, tight lacing, stays of whalebone, &c. These last are productive of a good many cases. Not unfrequently one patient gets up well from the effects of labour, and the first time she dresses to go out pinches her excitable gland with lace strings, or punches it with the end of a piece of whalebone during the whole of her round of fashionable calls, and comes home with the breast excited to inflammation." This short paragraph contains much truth, and, beyond a doubt, explains the cause for the appearance of many a mammary inflammation for which the unfortunate doctor in numerous instances is blamed. Under the heading treatment of Mammillitis, our author says, "An excellent dressing for the nipple for the last two months is a rough coarse sponge, so cut as to cover the areola, and surround and cover loosely buttouch every part of the nipple. On this there should be but one texture of raiment, so as to allow of the evaporation of fluid as fast as secreted, and the free admission of atmospheric air. In cold weather when going out, the breast would of course be covered by all the clothing that is used for the protection of the other portions of the body. It is a great mistake to cover these important organs-important on account of their usefulness instead of their beauty, so thickly as they usually are: they bear exposure with great impunity When we wish to harden the nipples, we should bear in mind the circumstances; which harden our hands, and make use of them; we should equally avoid the circumstances that soften our hands. When a lady wishes to soften and whiten her hands, she wears kid gloves, and does not allow them to touch hard substances. In a like manner she may soften her nipples if she wishes to do so. To occasionally moisten them with water, and to allow it to evaporate slowly on exposure to air, is a good expedient to harden them. Friction with a dry towel or the fingers will assist in the process. It is a matter of great question whether various washes used to harden the nipples are not injurious instead of beneficial. They generally exert a chemical as well as a physiological effect, while this last is the only one desired. During lactation the same exposure to air and lightness of covering should be observed, and after nursing the nipple should be wiped clean and dry before being retained under the clothing. This is a rule that should never be neglected."

Much of the advice given in the above paragraph is totally contrary to our ideas of the rules that should be followed under the circumstances detailed,—but we are free to confess that even under the most orthodox treatment many cases prove troublesome. In such the reputation of Dr. Byford would certainly induce us to try the plans he recommends. The work is printed on beautiful paper, and bound in a substantial manner.

The Canadian Horse and his Diseases. By D. McEachran, M.R.C. V.S., Graduate of the Edinburgh Veterinary College, late Lecturer on Materia Medica in Upper Canada Veterinary School, Lecturer and Consulting Surgeon to the Board of Agriculture, Montreal, C. E.; and Andrew Smith, V.S., Edinburgh, Graduate of Edinburgh Veterinary College, Principal of the Upper Canada Veterinary School, consulting Veterinary Surgeon to the Board of Agriculture, Toronto, C. W. Toronto: James Crmpbell & Son. 1867.

We have received a copy of this little work, and cheerfully give it a passing comment. The authors are anxious to draw the attention of farmers and stock breeders to the great necessity of becoming familiar with some at least of the diseases which are peculiar to the horse. The diseases of Canada are specially considered, and the authors are desirous of exposing the impositions and denouncing the cruelties of quackery. In these pages the most simple language is used, so that it comes within the scope of all. The work consists of eighteen chapters, written in a clear style and easily to be understood. In the last chapter, will be found receipts and prescriptions, formulæ for various diseases. We regard it as a

most useful book for the farmer, and can cheerfully reccommend it. In fact no farmer should be without a book of this kind, as by a few timely remedies he will save many a valuable animal from either death, or permanent injury.

Synopsis of course of Lectures on Materia Medica and Pharmacy.

delivered at the University of Pensylvannia, with five lectures on the
Modus Operandi of Medicines. By JOSEPH CARSON, M.D.
Philadelphia: Henry C. Lea. 1867,

To students attending the lectures of the University of Pennsylvania, this work must be of incalculable advantage, giving as it does, a complete outline of the Lectures on Materia Medica delivered at that institution. Even to the Country practitioner, whose time is generally taken up with his practice, it will prove of great value as it contains much useful information, in a very small compass,

### PERISCOPIC DEPARTMENT.

# Medicine.

ON SCROFULOUS DISEASES OF THE EXTERNAL LYMPHATIC GLANDS AND THEIR TREATMENT BY IODINE AND OTHER LOCAL STIMULANTS.

BY DR. THOMAS BALMAN.

[The local treatment of scrofulous diseases of the external glands has not been much dwelt upon by authors of works even specially devoted to the subject of scrofulous diseases. The importance of the subject in practice cannot be over-estimated.]

From neglect, feeble health, or other causes, such swellings may assume a subacute condition; and, in place of subsiding, may go on slowly, and perhaps imperceptibly, increasing both in size and consistence, or they may manifest this peculiarity from the first. They then constitute the great majority of those cases of strumous glands which are so frequently presented to our notice in the out patients' wards of our numerous charitable institutions. In a case of this kind I usually proceed thus:

—If the swelling is recent I begin with iodine lotion, or this may be replaced by the diluted tincture of the Pharmacopæia—one part to three of water. Pledgets of lint, soaked in either of these lotions, are to be continuously applied to the tumour; and, in order to retain the moisture, they should be covered with a piece of gutta percha sheeting or oiled silk. If the tumour be of longer duration, firm to the touch, or has implicated

the surrounding textures, I pencil the surface lightly two or three times with the solid nitrate of silver, or with a solution of iodine. The former is the least irritating to the skin, and is, therefore, in many cases, the best to start with. This application is repeated at intervals of five or six days. All bandages, woollen wrappers, and other such articles of dress with which the patient is usually smothered, are removed, and the parts freely exposed; and, if within a convenient distance of the sea-coast, the tumour may be also advantageously bathed with sea water every morning.

This proceedure will produce in all probability one of two results, either a gradual diminution in the size of the swelling, or suppuration. In the event of the latter happening, the abscess should be opened at once—of course in the most dependent and favourable position. The parts surrounding the incision are then to be immediately painted circumferentially with the iodine solution. The application should extend as far as the limits of the tumour. The effect of this treatment is to cause the rapid collapse and effectual emptying of the sac of the abscess, and within a very short period probably, adhesion and closure of its cavity. The punctured wound, which may be covered with a piece of tow or charpie, very often heals without the slightest disfigurement, and we are enabled, if necessary, to coutinue our application. Abscesses which, if allowed to ulcerate, would continue many weeks, and perhaps months. may by this treatment be sometimes obliterated in a few days.

Injections of iodine, zinc, and other astringent lotions, as proposed and extolled by Lugol, Tylor Smith, and others, have never succeeded. in my hands, in procuring any corresponding results. And the almost universal practice of poulticing in order to accelerate the formation and discharge of matter has long appeared to me still more objectionable: and I confess that I was some time ago surprised to find such an accomplished pathologist and excellent surgeon as Mr. Paget recommending this antiquated and, I truly believe, mischievous practice in the treatment of these complaints. However useful poultices and moist applications generally may be in acute phlegmonous inflammation of the lymphatic glands, in deep-seated or painful abscesses, or in a variety of other cases which it is scarcely necessary to name, I am satisfied that when continued for any length of time in strumous, suppurating, and other sores, whether involving the absorbent glands or other textures of the body, poultices tend to relax tissue, impair the tonicity of the capillary blood-vessels, sustain the discharge, and facilitate the spread of the suppurative process, and not unfrequently lay the foundations of sinuses and of those horrible bridge-like marks which so often disfigure the victims of this disease.

—The benefit of local stimulation by iodine is not simply limited to acrofulous abscesses. During the last two years I have been in the habit, both at the Dispensary for Diseases of the Skin and in my own private practice, of using it freely in a variety of other cases: in chronic affections of the joints, inflamed breasts, boils, carbuncles, old cicatrices, ædema, and in the slighter forms of erysipelatous inflammation of the skin. In carbuncle the effect is sometimes most striking: the pain and irritation are almost immediately relieved, and the slough is rapidly thrown off. Ganglions, when situated about the wrist, may be got rid of by the same means. They should be first punctured with a fine needle, and a slight amount of pressure continued for a few weeks afterwards.

I at first thought that the local use of iodine in the way described was novel; but I have recently discovered that Mr. Davies, in a work written five-and-twenty years ago, has recommended the external application of the simple tincture in some of the cases I have mentioned. His book, which I regard as a very valuable contribution to medical literature, should be read by all who are desirous of knowing the full therapeutic influence of this important remedy. A series of cases was afterwards published in the Lancet, by Dr. Langon, in support of Mr. Davies's views, and are well worth perusal.

A question of some importance will here naturally present itself. How, it will be asked, does local stimulation, either by iodine or nitrate of silver, subdue inflammatory action, lessen the swelling, pain, and irritation, and accelerate the cure, in such cases? The pathology of inflammation, as revealed by the microscope, explains in some measure, I think, how it does so. The phenomena of inflammation we know to consist primarily and essentially of enlargement or dilation of the blood-vessels and capillaries of the part affected; accumulation, crowding together, and final arrest of the blood-corpuscles, and their subsequent adhesion, both to themselves and to the coats of the vessels, effusion of the liquor sanguinis into the cellular and adjacent structures, causing the swelling, wdema, heat, pain, and redness which are known to characterize inflamed textures. We have to deal, then, with impeded action, diminished contractile power in the coats of the capillary blood-vessels, and consequent inability of the arteries to grasp and push forward that vital stream upon the healthy and continuous movement of which the whole fabric is sustained. Iodine and nitrate of silver, so much extolled by Mr. Higginbottom, and perhaps any other local stimulant, seems to restore this impaired vital contractility of the blood-vessels, hurries on these struggling and pentup globules to complete their labyrinthine journey in the general torrent of the circulation. The local stimulating action of these substances

must further tend to quicken the action of the absorbents, and thus materially assist in the removal of the effused products.—Lancet.

#### ON EPISTAXIS.

By Sir HENRY MARSH, M. D., Bart., Physician in Ordinary to the Queen in Ireland.

Close observation of the natural process by which this exudation is effected, affords much useful instruction, and teaches us what the true nature is, of many of those internal and unseen hemorrhages, which formerly, and still are popularly, referred to the rupture of the trunk of a blood-vessel. This, doubtless, is the occasional, but comparatively rare, cause of a fatal hemorrhage. The most frequent cause of hemorrhages, often fatally profuse, is,—as may be observed in epistaxis, capillary exudation,—blood extravasated, not from an arterial or venous trunk, but from myriads of turgid capillary and exhaling vessels.

A remarkable case, elucidating this truth, occurred at Steevens's Hospital. A young man, labouring under hemoptysis, was admitted a few hours before my morning visit. Having spoken to, examined, and prescribed for him I passed on. Whilst talking to the patient who lay in the next bed, I heard a gurgling sound and turned round: the man to whom I had but a moment before been speaking was dead,—was suffocated. A minute and careful examination disclosed neither tubercle, nor cavity, nor consolidation, nor lobular nor diffuse apoplexy, nor ruptured trunk, in any part of the parenchyma of the lungs; all the larger bronchi were nearly filled with blood, which was coagulated in them, particularly at and about the bifurcation, so as to obstruct the ingress of air. It was a case of bronchial hemorrhage,—of copious sweating of blood from innumerable capillary tubes distended with blood. I say sweating, because I doubt there being any rupture or breach of surface.

In some forms of fever, sweating so profuse has occurred as to soak through the bed, and to accumulate in large quantities in a vessel placed underneath.

A capillary extravasation of red blood may be as profuse as a capillary exudation of white blood. A mucous membrane may copiously sweat blood; I have seen the same thing happen from the pores of the external skin of the face. One case, a very remarkable one, I shall briefly refer to. The patient was a young woman four or five-and-twenty years of age: herself intensely strumous, as were also her parents and brothers; she was subject early in life, both before and after puberty, to spontaneous epistaxis. She was attacked with fever. The symptoms presented the usual aspect of

scarlatina; a dusky red rash was universally diffused, with sore and swollen throat, but no ulceration. There was a well-marked febrile movement in the system. On the third day the whole characters of the case were altered; fever subsided, the throat was no longer complained of. Quite suddenly petechiæ, some very small, some as large as a split pea, appeared under the cuticle, and were rapidly scattered over the whole surface; their colour was livid, and they soon became black as ink. After the lapse of a few days dark grumous blood began to ooze from the gums, from all the points of junction of the internal and external skins, and from the nares, and appeared mixed with the urine and faces; patches of ecchymosis stained the skin over large spaces. The debility, vascular and muscular, was extreme, and the fetor emanating from the breath and whole person in the highest degree offensive. All signs of scarlatina vanished.

In this miserable state, with a gradual augmentation of every worst symptom of purpura hemorrhagica in its most malignant form, she lingered on for nearly three weeks.

For many days before death the following remarkable phenomena manifested itself. Blood oozed and descended in streams from the pores of the skin of the face only. With intense interest I watched the process. The surface having been wiped clean, minute globules of dark blood were seen to exude from every pore; these rapidly increased in size, coalesced, and formed streams which flowed on every side; a profusion of blood was thus extravasated, in like manner as drops of rain increase in size in descending, unite, and form tortuous little rivers, on the glass of a window of a carriage.

Whether attributable to the great tenuity of the Schneiderian membrane, connected with delicacy of the sense of smell, or to the highly vascular network of this membrane, or to the copiousness of the supply of blood to the brain, or to all unitedly, certain it is, that of all the hemorrhages that are most frequent of occurrence is epistaxis.

To this variety of hemorrhage some are much more prone than others, and this may depend not only on constitutional causes, such, for example. as mal-organized blood, but also upon superior delicacy of the mucous membrane and it vessels; a condition of mucous membrane, as well as of external skin, frequently characteristic of struma. Whatever be the cause the fact is certain, that blood streams from the nares with more facility than from any other mucous surface.

This is the case, in varied degrees, at every period of life, but much more remarkably so at the extremes of life; the most frequent time of occurrence of epistaxis is, however, during the period of growth. I have

many interesting cases recorded which prove that this hemorrhage, having appeared in early youth, disappears during middle life, and returns as years accumulate, and old age approaches. The period of senility varies much in differently constituted individuals, and is hastened or retarded by the events and habits of the past life.

It is a curious fact that the epistaxis of the growing period of life should, in so many instances, resume its sway towards its close. It may be termed the Epistaxis redux of advanced age. Within the last few days I attended a lady, now in her seventy-fourth year, affected with severe hemoptysis. Thrice before, several weeks having intervened, she was similarly affected, and twice, previously to the attacks of hemoptysis, she bled profusely from the nose. Inquiry elicited the following facts: In early life, antecedent to the full establishment of the catamenia, she had been a martyr to idiopathic epistaxis; at the menstruating periods she suffered habitually much pain, and the discharges were very profuse, and at the period of the cessation of the menses, when they recurred at long and irregular intervals, the hemorrhage was excessive, and the blood came down in large clots. She had been married at a young age, but had never been pregnant. This old lady does not appear to labour under any organic disease: the heart's action and the breath-sounds are perfectly normal. I I have on record several equivalent cases.

Considering, then, the facility with which blood is exuded from the nares it is not contrary to anticipation that mental emotions should affect the vessels of the brain, as frequently to give rise to epistaxis. Congestions, inflammations, and diseases of the brain are frequently preceded and accompanied by epistaxis; this I shall have occasion hereafter more particularly to notice. Those mental emotions which produce cerebral congestion (for some, not all, produce this effect), are often signalized, and relieved too, by a flow of blood from the nares. Epistaxis is thus often a naturally provided safety-valve. The following event, of which I happened to be an eye-witness, illustrates this principle. A child some two and a half or three years of age, in attempting to descend a flight of stairs, fell, and rolled down to the first landing place. He was much hurt, and cried bitterly. The nurse, a strong plethoric woman, greatly attached to the child, ran to take him in her arms; the child's father, at the head of the stairs, sternly forbade her to touch him; she was compelled (standing at the foot of the stairs) to look on. Another attempt (after many efforts and touching appeals for help) was made by the child to descend. Again, he fell. The nurse could endure it no longer; her feelings over-She rushed up stairs, and took him in her arms, and expowered her. claimed, in a highly excited tone, "If it cost her her life, she would save

the child." She became deeply flushed and a copious stream of blood rushed from both nostrils. This woman, whom I had frequent opportunity of afterwards seeing, had never been subject, previously or since, to any form or variety of abnormal hemorrhage. This was a well-marked instance of a strong mental emotion causing epistaxis, of temporary origin, and altogether exempted from any pre-existing or hereditary hemorrhagic diathesis. I shall, on a future occasion, notice how frequently this diathesis, connected with struma, is hereditary.

A lady, in her fortieth year, of florid complexion, and uncontrollable temper, in a fit of furious and unrestrained anger, was seized with epistaxis. Blood from both nostrils flowed in profusion and persisted so long that the family became seriously alarmed. When I saw her she was nearly pulseless; there was a death-like pallor present, and a cold, clammy perspiration; her voice was feeble, and she could articulate only in a whisper, yet she did not appear to be alarmed. There was no time to be lost: much blood still flowed; much descended from the posterior nares, and was swallowed; some hours previously she had vomited blood. dent to my visit, all the usual means to check the blood-flow had been in vain employed. Upon close examination it was ascertained that the flow of blood was much more profuse from the left than from the right nostril. and by means of a flexible catheter passed along the floor of the nose, a plug with a strong silk thread firmly attached, was, through the mouth, introduced into the left posterior nostril. This completely controlled the blood-flow at that side; as it was not desirable too suddenly wholly to arrest the bleeding, the other nostril was not plugged. The loss on the right side became now comparatively small.

So much distress, so many unpleasant consequences have occasionally arisen from the plugging of both nostrils, that, whenever practicable, one of the air passages should be left free. The double plug is often needlessly applied. Sometimes, however, it is unavoidable. It may be well to remark, that if sponge be used for a plug, it is better to enclose it in lint, otherwise, when distended by moisture, it may so insinuate itself into the narrow spaces between the delicate bones of the nose, as to cause difficulty and even injury in its removal.

Months elapsed ere this lady recovered in health, strength, and complexion, from this profuse and prolonged nasal hemorrhage. In early life she had been subject to idiopathic epistaxis; her menses were always superabundant, sometimes extremely profuse. At each of her confinements her losses of blood were enormous. About a week before the attack of epistaxis she had menstruated copiously. Her habits of life had always been temperate. Thus in this case, a fit of anger, or rather of fury, was the exciting

cause of the epistaxis. But its dangerous profusion is to be attributed to the pre-existence of a well-marked hemorrhagic diathesis.

The leading facts of another somewhat similar case shall be briefly detailed.

Mrs. S., aged 49, has ceased for a year and a half to menstruate. She is now labouring under organic disease of the heart. The symptoms indicate the existence of contracted orifice of the mitral valve. She has had two severe attacks of rheumatic fever, one before puberty, one at the age Eight years have elapsed since she first complained of dyspnœa and palpitation. Thirteen years ago she sustained a severe mental shock, by the sudden and unexpected death of her mother, to whom she was fondly and devotedly attached; the more, perhaps, because, though long married, she was childless. The mental emotion produced by the suddenly imparted news of her mother's death was very great, she was seized with violent headache, which was followed by most profuse epistaxis; for three days the hemorrhage never ceased. She lived in a remote part of the west of Ireland, and it was not until the fourth morning after the commencement of the attack that the physician reached her house; he found her pulseless, and apparently dying. He plugged both nostrils: she was unable to articulate, and with difficulty could swallow; she lay for upwards of three weeks in a state of insensibility; this period of time was a blank in her existence. She slowly recovered, but her natural complexion, vigor, and strength, she has never since then repossessed. In her case it is specially remarkable that, from the earliest age up to the full period of puberty, she had been subject to idiopathic epistaxis, so much so as to interfere with all her girlish amusements and occupations. The flow of blood was never during her early life profuse, but occurred so frequentlysometimes spontaneously, sometimes from the slightest causes, that she lived in a state of perpetual apprehension. When the menses were fully, established the epistaxis ceased, and did not again recur till, as related, a powerful mental emotion recalled the latent predisposition, and accounted for its all but fatal persistence and profusion.

In the pages of history we meet with several instances of hemorrhage produced by the most overhelming of mental influences: wounded pridethwarted and disappointed ambition. A Doge of Venice burst, as is narrated, a blood-vessel, and died suddenly, when he heard the bell of St. Mark's announce by its toll the appointment of his successor. At Salisbury, the perverse, mentally blind, and unfortunate monarch of England, James II., was, on the eve of an expected battle, which he never fought, seized with epistaxis. It continued, and confined him to bed, for three days.

The influence of augmented heat or caloric upon the cerebral circulation, becomes a frequent cause of temporarily excited epistaxis. Hence it is that at the hottest season of the year, hemorrhages in our climate are most frequent. Hence also it is that an overheated bath, heated rooms, indulgence in ardent spirits, the sun-stroke, violent exercises, so affect the circulation that hemorrhages oftentimes immediately ensue. Intense thought long persisted in, renders the vessels of the brain turgid, and gives rise to a blood-flow.

Hence, too, the great imprudence and injury of ordering those patients threatened with phthisis, who evince the hemorrhagic diathesis, to overheated and dry climates; those who labour under what I have elsewhere termed hemorrhagic phthisis should never be sent to a climate which tends directly to augment the existing and often fatal evil.

Those causes which suddenly excite and stimulate the heart's action, so as to propel blood more rapidly to the brain, do, in many persons, give rise to epistaxis. In fevers, at the commencement of the stage of reaction, this is especially and strongly exemplified. A flow of blood from the nares is the starting-point of many fevers, of none more frequently than the Rubeolæ.

Some months since I happened to attend two boys, each about ten years old, in the same room. They were playfellows and companions, but not relatives. I was much struck by the contrast between these two cases. One possessed a sound constitution, free from any hereditary taint, and had never been affected with idiopathic epistaxis. The other had not long recovered from a tedious and prolonged succession of strumous abscesses of the cervical glands, which left characteristic and deforming sears and cicatrices. From infancy he had been prone to distressing and perpetually recurring attacks of epistaxis. Twice the blood-flow was seriously profuse. Both these boys were attacked, within a few days of each other, with measles. At the time when the rash was beginning to appear they both complained of headache, and they both bled from the nose; the boy with untainted constitution had no recurrence of the bleeding, was greatly relieved by it, and passed through the disease without one untoward symptom; the boy who was marked with the signs of struma (both his parents were intensely strumous) during three days bled so frequently, so copiously, that his life was endangered. The former was in a few days perfectly restored; but months elapsed ere he who was marked with struma resumed his former ruddy and deceptive appearance of health.

Thus were evinced, in strongly contrasted relief, the temporary and salutary epistaxis of a perfect constitution, and the protracted and exhausting epistaxis of the distinctly impressed strumo-hemorrhagic diathesis.

Here it may be noticed how very distinct the hemorrhage of incoming fever is from that which takes place towards its close. Epistaxis is the most frequent variety of bleeding during the hot stage; intestinal, sometimes uterine, when the fever is advanced; and when, at this stage, it or any other variety of hemorrhage, sets in profusely, it is a most formidable symptom, and indicates the great change which has been wrought by continued febrile action in the component ingredients and constituency of the blood. At the ingress of the reaction of fever no material change has as yet been produced; towards the close the blood has been thinned and altered.

Of all the signs of the febrile movement the most invariable is wasting. No matter what the type, this is the most uniform result. Scanty are the supplies; the primary assimilative function, is, in a great measure, suspended; so must be that of sanguification. The body feeds upon itself; as fever progresses, the blood becomes more and more attenuated; and in those fevers which are caused by malaria and by animal and other poisons, the blood becomes so deteriorated, so reduced in tenacity and density, that it oozes and is exhaled from mucous surfaces. Thus a passive hemorrhage is produced, altogether distinct from the active hemorrhage which so frequently, at the incoming of fever, relieves the tension and increased action of the vessels of the brain.—Medical Press and Circular.

## A NEW TREATMENT OF LEAD POISONING. [Translated from the Gazette des Hopitaux.]

In a recent clinical lecture, Prof. Monneret, of the Paris Medical School, gave the following exposition of his peculiar treatment (cold intus and extra) of lead poisoning:

Of all poisonings, that by lead and its salts is the most frequent. It is not my intention to-day to describe the different phenomena of this intoxication; I shall only say that they are very varied, and come on sometimes slowly, sometimes rapidly. In the first place, the workmen experience vague abdominal pains. Then there are troubles of the sensibility and motility, commencing in feebleness and ending in paralysis. After a certain time the abdominal colics become very violent, and are accompanied by obstinate constipation. This increase in the intensity of the colics is often due to excesses in drinking, which are usually denied by the patients.

Like other physicians, I had always treated these accidents by the free use of evacuants, when, some eight or nine months ago, the idea of a rational treatment suggested itself to me, based upon the supposition

that the principal symptoms are due to an affection of the sensitive and motor nerves. This treatment was by the application of cold, intus et extra. Cold, as is well known, either directly or though the capillaries, has a great influence upon the nervous system, and thus upon the secretions. For this reason I was led to inquire whether the sensibility and secretions of the intestines could not be modified by the action of cold as well as by that of the evacuants which I, in common with others, had always employed. The experiment being a harmless one, I was perfectly justified in making it, and, in addition to this, I was confirmed in my ideas by the success of an analogous preventive treatment by hydrotherapy as followed, under my directions, in one of the Clichy workshops. I myself, in my own service, have used this treatment in more than forty cases of workmen showing the early symptoms of lead poisoning, and have found it sovereign.

As soon as I see the patient I order him some iced drink, lemonade for example, occasionally adding a little wine. At the same time I order three cold water injections daily, the water to be retained in the rectum as long as possible. In addition to the cold drinks and injections, the patient is subjected to hydrotherapy morning and evening, and, in some cases, a shower-bath is given at noon. This may be from a hosepipe, or the ordinary shower-bath, and should never last more than a minute. The action of this douche is not simply refrigerant, but is much more profound and general, stimulating the capillary vessels, which contract, at first, driving back the blood, and then expand, allowing a free return. Sometimes the action of the glands is increased, and a light perspiration covers the body. These effects of hydrotherapy, upon which I hope to dwell longer at another time, are very manifest and very active, and one can understand that the activity of the tissues is renewed. these different means I add a cold poultice, in order to maintain a constant refrigeration. And, in this connection, let me teach you what I was ignorant of for a long time—that is, the way to make a cold poultice.

Take a large linen or cotton cloth, and on it spread a layer of linseed meal half an inch thick. Upon this place pieces of ice about the size of a hen's egg; then add another similar layer of meal, and then fold the cloth over so as to inclose the whole. Apply this to the abdomen, and the gradual melting of the ice keeps up the influence of the refrigeration for some three hours. This powerful agent I employ, not only in lead colics, but in all cases in which such action is indicated (such as typhoid fever and peritonitis, for example) and greatly prefer it to the application of ice in bladders, which is sometimes intolerably painful to the patient. By the treatment just described the most speedy results are obtained, and I

have seen the disease entirely cured in from two to seven days. In the forty cases observed by me, with two exceptions, all the symptoms of nervous trouble have disappeared as if by enchantment. The progress toward cure is this: during the first three days the constipation persists, and the injections are returned as they were given; the pain, however, disappears. On the fifth or sixth day the fæcal matter, more or less softened, is rendered naturally, and the cure is complete.

For a long time this treatment appeared so simple that I regarded it as purely palliative; to day, however, I consider it a powerful curative agent, acting upon the capillary and vasomotor systems, and putting in play the natural secretions and excretions, thus aiding the organism to free itself from the poison which has manifested itself by a profound disturbance of the nervous system. It is by restoring to this its activity and molecular action that cold is curative to such an extent.—Boston Medical and Surgical Journal.

## GONORRHŒAL RHEUMATISM.

Dr. Parvin, the editor of the Western Journal of Medicine, translates the following description of Gonorrheal Rheumatism from the Archives Généralee de Medicine. The disease is not sufficiently borne in mind by many practitioners, and we are glad of this opportunity to call their attention to it:

Fournier believed in the specific nature of blenorrhagic rheumatism.

1st. The blenorrhagia, or more properly the urethral affection, is not only the occasional cause of rheumatism; it is the efficient, direct, necessary cause.

2d. The articular or other complications of blenorrhagia are very different from simple rheumatism, very different as to symptoms, as to localizations, as to evolution, as to possible complications, as to future consequences, and hereditary transmission, etc., whence can be inferred an essential difference between these two maladies.

The following characters distinguish them from each other: 1. The recognized and established cause of an attack of simple rheumatism is the influence of cold, or of a rheumatic diathesis. From personal reresearches, M. Fournier affirms that cold or moisture are absolutely foreign to the manifestations of blenorrhagic rheumatism: nor has any hereditary or acquired arthritic diathesis any more influence. The cause of these manifestations is the blenorrhagia, and we see patients who, independently of any preceeding cause, have rheumatism with each new blenorrhagia.

2nd. The symptoms offer differences not less marked. Blenorrhagia

rheumatism is oftenest apyretic, or if there should be fever, it is less intense, less persistent than in simple rheumatism; it is neither accompanied with the profound depression, nor with the sympathetic phenomena which are observed in acute rheumatism. Blenorrhagic rheumatism is quite often mono-articular, or at least is never generalized over the system to the same extent as simple rheumatism; often it is almost indolent, or quite in character with a true arthritis it is exceedingly painful; it is much more fixed; it does not offer those sudden or rapid delitescences, frequent in common rheumatism; resolution takes place with greater difficulty, and often leaves behind a hydrarthrosis, which is rare in the last; finally the blood does not present the buffy coat so constant in acute simple rheumatism.

3d. The complications in the great serous membranes, which simple rheumatism develops, are as rare, as exceptional as possible in blenor-rhagic rheumatism.

In return, this has a very curious localization, which falls in simple rheumatism: it is opthalmia, not that which results from the contamination of blenorrhagic pus, but that form known as metastatic, or from internal cause, essentially benign in comparison with the preceding, almost always affecting both eyes, and passing from one to the other with remarkable mobility. In forty-five cases, M. Fournier has observed seventeen in which there was association with articular symptoms.

The evolution, the duration, the terminations of the two maladies equally differ.

As to treatment, while general remedies succeed best in simple acute rheumatism, on the contrary, in blenorrhagic rheumatism local means, (local blood-letting, blisters, painting with tincture of iodine, absolute immobilization, etc.), are efficious.

Finally, recurrences are very frequent in each disease, but under different conditions. Simple rheumatism recurs under causes the same as those which have produced a first attack; cold moisture, etc., or from constitutional disposition. Blenorrhagic rheumatism, on the contrary, repeats itself only as the result of a new blenorrhagia.

From the establishment of these differences, both numerous and radical, continues M. Fournier, I believe myself authorized to conclude: 1, that blenorrhagic rheumatism is not a simple rheumatism supervening as an incident in the course of a blenorrhagia; 2, that it has its own individuality, and ought to be distinguished nosologically from simple rheumatism.

If in certain complex and difficult cases there appear to be strong analogies between the two diseases; in its pure and simple forms, blenor-

rhagic rheumatism has a physiognomy so peculiar that it is recognized at once by the practitioner of a little experience.

After having thus presented the different arguments which demonstrated, in his opinion, the specific character of blenorrhagic rheumatism, he next inquired if the name given it represented the true idea we should have of the disease.

The name rheumatism, because consecrated in medical language, should be preserved, and in addition, blenorrhagic rheumatism is a special mode of this complex morbid state called rheumatism. As to the term blenorrhagic, when we consider that this term is badly defined, and has been applied to affections very different from each other; and that, on the other hand, rheumatism far from manifesting itself indifferently in all diseases called blenerrhagic, is never observed but with a urethral blenorrhagia, it would seem essential that the urethra must be involved in order that the rheumatismal manifestations should be produced.

Comparing, then, these accidents with those which simple excitation of the urethra can cause, such as intermittent febrile paroxysms, suppuration in different parts of the body, arthritis even. M. FOURNIER thought that the rheumatism called blenorrhagic could be a manifestation of the same sort, and like them, be a reflex phenomenon of urethral irritation. It was less a blenorrhagic, than a urethral rheumatism; the author proposed the adoption of this name.

#### LARYNGOSCOPY.

The following useful suggestion is made by a correspondent of the Chicago Medical Examiner:

"I have frequently been able to overcome the irritability of the throat, sometimes so troublesome in laryngoscopic examinations, by throwing upon the velum and posterior portions of the pharynx a spray of sulphuric ether, by means of Richardson's apparatus. The patient should take a full inspiration before commencing the operation, and the spray should be rapidly carried from point to point, so as not to produce congelation. This method is quicker, more convenient, and more efficacious than ice."

Sir William Ferguson has been appointed Seargent Surgeon to the Queen. The old title of Seargent Surgeon extraordinary has been revived, and Mr. Paget appointed to the office. These appointments according to the *Medical Times and Gazette* give great satisfaction to the profession in Great Britain.

# Canada Medical Journal.

MONTREAL, DECEMBER, 1867.

### AN INSANE HOSPITAL.

We have frequently referred to the subject of Lunatic Asylums and have more than once drawn the attention of our Legislature to the great need of an institution specially designed for the treatment of the insanc in this portion of the Province of Quebec.

We are at present in a political transition state, but it is to be desired that in the matter of our public charities, the local legislature in whose hands these affairs are left will act with promptitude and deci-We have before alluded to the barbarous state of the law as at present administered in regard to the insane. We mentioned last year the case of a poor servant girl who was attacked with acute mania following erysipelas of the head. She had been a patient in the Montreal General Hospital, and lacking the means in that institution of treating her secondary malady, the House Surgeon, Dr. Drake, made application to one of the Judges for a special order for her removal to an asylum. could not be granted and the unfortunate girl had to be sent to the common gaol. No vacancy occurred in the asylums either at St. Johns or Beauport, and in the course of a week or two death relieved her of her sufferings. Is this the only case of hardship that could be mentioned? We fear not. Indeed, in one of Dr. Howard's reports, there will be found the case of a woman who was sent from the Quebec gaol to the make-shift Asylum at St. Johns, and who died a very few minutes after her admission into that institution. These facts should be sufficient to urge on our Local Legislature the imperative necessity of moving in this matter, and without delay. Cases of acute mania are occurring almost daily, and the community in and about Montreal are constantly obliged to send their sick to the United States, because there is not in the length and breadth of this land a suitable institution for their care and treatment.

These reflections are suggested in consequence of having been requested by Mr. G. F. Cole, architect, to examine plans about to be submitted to the Government by the Medical superintendent of a building to take the place of the Asylum at St. Johns. It is, we believe, the intention of Dr. Howard, the able and efficient superintendent of that institution, to offer to build an Asylum provided the government prefers the contract system, and will grant him similar terms as those held by the proprietors of the Beauport Asylum.

We cannot but condemn the system of private Asylums, but in the absence of either means, or a desire to spend it, on the part of our government, we can only accede to the next best scheme as it is manifestly a reproach on our humanity to remain much longer without an Insane Hospital. We trust, however, that whatever scheme is chosen, due regard will be made to ample cubic space. In the Imperial paper on Colonial Hospitals and Lunatic Asylums, at part III there will be found "General Suggestions," and amongst these the following: "that in as-" sociated wards the total superficial space allowed to each patient, includ-"ing the area of the bed, should not be less than 7 feet by 11, in General "Hospitals, and  $5\frac{1}{2}$  by 9, in Asylums; the height of the ward should not fall short of 13 feet, nor the width of 22 feet." This would give in Asylums for insane a breathing area to each patient of nearly 800 cubic feet. In the plans which we have seen it is proposed to give 800 cubic feet in all associated dormitories and a greater area in single rooms. Ground room there is no lack of in our country, and in erecting a building for the above purpose all the scientific knowledge of the day should be brought to bear. We do not profess to understand architectural requirements, but must state that the plans submitted to our inspection appear to be excellent and a very decided improvement on the buildings already in existence in other parts of the Province.

Again we urge on the government prompt and decided measures on this important subject, and we trust, in selecting a site that the neighbourhood of Montreal and not St. Johns will be chosen.

#### CHANGES IN THE MEDICAL FACULTY OF MCGILL UNIVERSITY.

Owing to the continued ill health of Dr. Sutherland, who has filled the chair of Chemistry since the year 1849, he was this fall compelled to resign his Professorship. 'At the meeting of the Governors of the University in October last, at which his resignation was received, he was unanimously elected Emeritus Professor. At the same time Dr. Robert Craik, formerly Professor of Clinical Surgery, was una-

nimously elected to the Professorship of Chemistry; Dr. George E. Fenwick was also elected unanimously Professor of Clinical Surgery. During the seasons 1866–7, Dr. Craik lectured for Dr. Sutherland, and Dr. Fenwick lectured for Dr. Craik. Dr. Drake, House Surgeon of the Montreal General Hospital, has been appointed by the Faculty, Demonstrator of Anatomy, and Dr. George Ross has been named Curator of the Museum. While congratulating these gentlemen upon their several appointments, we cannot but deeply regret the cause which has occasioned it. As a lecturer on Chemistry, Dr. Sutherland had few equals—being thorough master of his subject, and gifted with a ready flow of language, which enabled him to throw around even the most tedious portions of chemistry an interest sufficient to attract the attention of the student. We are sure that all who have had the pleasure of following his course will unite with us in the hope that ere long his health may be completely restored.

### A CORRECTION.

In the London Lancet, of the 2d of November, there appears an article from the pen of Sir J. Y. Simpson, Bart., M.D., of Edinburgh, on "Carbolic Acid and its uses in Surgery." In the course of the article he alludes to some remarks made by Dr. Hingston, of Montreal, at the meeting of the British Medical Association, in the following words:—
"In the discussion which followed, Dr. Hingston, the able and accomplished Professor of Surgery in the McGill College of Montreal, stated to the surgical section," &c., &c. We need hardly remind our readers that Dr. Hingston is Surgeon to the Hôtel Dieu and not Professor of Surgery in McGill College, that chair being now filled, as it has been for the past thirty years, by G. W. Campbell, A.M., M.D., the worthy and respected Dean of the Faculty. We believe Dr. Hingston has made the correction in the proper quarter.

E. FOUGERA, NEW YORK.—We would call attention to the preparations of this eminent manufacturing establishment; see advertising department of the Journal. Mr. Ebenzer Muir, Druggist, Place d'Armes, Montreal, has been appointed Agent for Canada, for all of M. Fougera's preparations. We have, personally, used Mr. Fougera's Compound Iodinized Cod Liver Oil, and can, from experience, pronounce it one of the best articles of the kind now in use, and trust it will receive that attention from the profession which it so deservedly merits. His other preparations also stand high, both for excellence and purity.

We notice by the *Lancet* of November 2, that W. H. Corbett, M.D., Staff Assistant Surgeon, has been promoted to Staff Surgeon. We congratulate the Doctor on his promotion. Dr. Corbett is a son of Sheriff Corbett, of Kingston, and is a graduate of McGill College, May, 1854.

The Philadelphia Medical Reporter, of November 2, informs us that Asiatic Cholera, of a very malignant type, broke out suddenly the previous week in the Navy Yard, near that city.

We notice amongst other announcements of New Books that our friends Messrs. Lindsay & Blakiston, Medical Publishers of Philadelphia, are preparing to issue early in January next "Reports of Cases and Clinical Lectures by the Medical and Surgical Staff of the Pennsylvania Hospital, with illustrations, &c., &c. This is the first issue of this kind in the United States, and coming from the oldest Hospital and from the very centre of Medical Science there, it will no doubt form a very creditable and attractive volume.

From the same publishers, and to be issued about the same time, we are promised "An Annual of Therapeutics, Pharmacology, &c., translated from the French of A. Bourchadat, Professor of Hygienne, &c., to the Faculty of Medicine Paris, and edited by M. J. DeRossat, M.D., adjunct to the Professor of chemistry in the University of Maryland, &c., to form a neat 16mo volume. The eminently practical character of this publication which appears annually in Paris, and its extended circulation throughout Europe, have induced its reproduction in this country.

Professor Dickson, of Jefferson Medical College, in a learned paper in the Richmond Journal, sustains the doctrine of cycles in disease, and declares his belief that venesection is again becoming a necessity of practice. "We have ceased to be burthened," he says, "with the prevailing timidity as to the lancet. Even if we are mistaken in our belief that we have passed through the adynamic cycle, and in the advent of a new phase less asthenic, surely the experience of our late war has proved, that under the most depressing contingencies of imperfect nutrition, shelter, ventilation, clothing, the loss of blood is far less impressive for evil than has been supposed. And we will hereafter bleed a patient in a doubtful case with vastly less misgiving, and offer him much more readily the chance of a reasonable experiment, the anceps remedium, which may require courage, but which, as I have maintained, we are bound to prefer to abstinence or inaction."—Pacific Medical and Surgical Journal.

## CANADA

## MEDICAL JOURNAL

## ORIGINAL COMMUNICATIONS.

Lectures on the Pathology and Treatment of Joint Diseases. By Louis Bauer, M. D., M. R. C. S., Eng., &c.

## VI.

TREATMENT OF THE SEQUELÆ OF JOINT DISEASES-Continued.

If we consider the small proportion of accidents connected with brisement force, and the large number of operations I have successfully performed, they scarcely command our notice. But even this insignificant number of accidents may be reduced by still greater precaution, and during the last two years I have successfully avoided them entirely, and hope to do so for the future. Whenever I have reason to suspect infirm-epiphyseal connections, I do not attempt to break up at once the intra-articular impediments, but do so in three or four different times and secure each time the gain by appropriate mechanical appliances. The safest way however to break up adhesions of this description is by extension and not by flexion, as I have before advised. The latter is more efficacious but more dangerous in producing diastasis.

In protracted cases of false anchylosis, we are likewise necessitated to repeat the forcible extension several times before succeeding in giving the extremity the full benefit of a straight position, and we may succeed at a third or fourth repetition when the first attempt proved very inauspicious. This is especially the case when peri-articular scar-tissue complicates the mechanical difficulty.

After the brisement force has been performed, the extremity should be firmly surrounded by a well applied flannel bandage, with ascending tours, from the periphery towards the interested joint, and the latter with tightly applied strips of adhesive plaster spread on Canton flannel, over which the flannel bandage is continued to the body.

The extremity is then placed in a well adapted and well padded iron splint, and thus secured, kept at rest for several weeks, until the last vestige of soreness of the joint has disappeared.

When the patient is perfectly free from pain or other symptoms, he may be permitted to leave his bed, and walk, but even then the limb should be supported by the same instrument which I have recommended for the after treatment of inflammation of the knee-joint. (Vide Figs. 11—12.)

Most patients content themselves with a straight, useful and stiff knee-joint. But very few insist upon the re-establishment of motion. In this case all those measures have to be adopted which I have detailed under the treatment of stiff-joints. To realize a full share of mobility under these circumstances is a therapeutic object of considerable difficulty, and should not be entertained without due deliberation. The number of cases in which I have succeeded in re-establishing motion is very small, and in two only perfect. If we consider that in most of these cases the articular cartilages and the synovial lining are destroyed, and that the intra-articular fibrous tissue passes from bone to bone, and from wall to wall, we should not be surprised when success attends but rarely these efforts. Moreover, the intra-articular fibrous tissue again rapidly unites with the same articular surface from which it has been torn, and this is an additional difficulty in the re-establishment of free motion.

When osteophytes unite the bones between which the joint is formed, there is of course no mobility, and the firmness of the joint simulates that of true bony union, although the previous history of the case may suggest the character of the abnormal connection. The brisement force is after all the only safe diagnostic test. Fortunately the osteophytes are not true bony structure, and possess neither its elasticity nor its firmness. These bony splints are rather fragile, and break readily with a crackling sound as if true bone was giving way.

The presence of osteophytes does not in any way interfere with the brisement forcé and its ulterior results, the after treatment, nor is it materially affected by them.

In extensive and complete osseous union of the knee-joint, brisement forcé is of course ineffective. Rhea Barton's operation alone is calculated-to meet the emergency. Although originally proposed for the relief of anchylosis of the hip-joint, its author conceived the practicability of the operation in the same morbid condition of the knee-joint. In 1835, he, for the first time, performed the exsection of a wedge-formed piece of bone from the knee, and the result attained was highly satisfactory. The wound closed in two months, and in five and a half months the patient resumed his avocation as a practising physician.

The second operation of this kind was resorted to by Prof. Gibson, of Philadelphia, and likewise terminated favourably, the patient being capable of walking, without crutches, five months after.

The third operation Dr. Gordon Buck successfully performed at the New York City Hospital, in 1844. The patient subsequently sustained a fall from a ladder and fractured the new union; recovery ensued without any untoward accident.

Since then the same operation has been repeated by Mutter, Bruns, (Tubingen,) Heuser, B. Langenbeck, Reid, Robert, Post, (New York,) and others. As far as I have ascertained, but two cases proved fatal (Bruns and Post;) the balance recovered with useful extremities. The technicalities of Barton's proceedure may be found in every work on operative surgery.

The late Prof. Brainard, of Rush College, has, some years ago, suggested weakening the inter-articular substance by drilling it in various directions through a small wound, and then to fracture the rest. How many operations have been made according to this plan, I do not know, but its application signally failed in a case of one of our most accomplished surgeons, (Prof. Gross.) and a chisel had to be resorted to, which was driven through the bony connection.

A similar proceeding had been proposed by Prof. Shuh, of Vienna, as early as 1853, but did not meet with the approval of German surgeons.

Whether the recently introduced so-called osteoplastic operation of B. Langenbeck has been attempted in true anchylosis of the knee-joint, I am equally ignorant, but apprehend that a simple separation of the articular faces by drill or saw will scarcely suffice to give a good form to the extremity, the new bony substance being an impediment; and, therefore, I would prefer, of all the methods suggested, that of Rhea Barton, which has proven itself both effective and comparatively harmless.

The indications for and the technical execution of brisement force are in most others joints the same as at the knee-joint. But in reference to the hip-joint the operation is subject to some modification, with which I shall now occupy your attention.

Before entering upon the practical consideration of the subject, a short recapitulation of the anatomical condition of the joint, left by hip disease, will not be out of place. Like the knee-joint, this articulation presents the three forms of anehylosis. Of these the true or bony anchylosis is certainly of very rare occurrence judging from the few specimens of this character which can be found in the most complete collections of morbid anatomy. I do not think that I have seen more than two cases during a practice of nearly thirty years duration. Osteophytes are often met

with in the neighbourhood of the hip joint recovered from morbus coxarius. Fibrous anchylosis is unquestionably the most common result of that disease, and we find it generally complicated with malposition of the thigh, arising from muscular contractions.

I have had repeated opportunities of thoroughly examining the anatomical status of joints thus changed. In the first place I have found the acetabulum enlarged in a posterior and superior direction, giving it almost the shape of a figure eight; the new accession being the smaller part. The cartilaginous covering of the acetabulum proper had almost entirely vanished, and upon the accessory portion none whatever could be detected. In some instances the femur was riding on the remnant of the acetabular margin separating the two articular segments, and for this purpose had a corresponding groove which gave it an accurate fit.

Of the femur, the head had been entirely lost in every single instance, and the neck more or less shortened.

The intra-articular fibrous adhesions fastened the end of the femur to the articular surface of the pelvis, permitting a slight degree of mobility. The capsular ligament was more or less comprised and identified with the intra-articular fibrous structure, and could only in one case, and to a slight extent, be separated therefrom.

In two instances fibrous bands obviously of a neoplastic character strengthcned the connection of the femur with the pelvis. The osteophytes arose from the neighbourhood of the acetabulum, were short and thick, forming no organic connection with the femur and would have offered no impediment to the brisement force.

From this short sketch we may arrive at an approximate estimate of the prevailing anatomico-pathological conditions which brisement forcé has to contend with.

Buchring was the first who extended the usefulness of brisement force to the hip joint, and made strenuous efforts to correct the co-existing deformities. The means employed by him were, however, so defective that but imperfect results were attained. He already adverts to several cases of failure and disaster; in one he reproduced the original disease to which the little patient eventually fell a victim. And I have to place an instance on record, in which by a fall, brisement force was effected and subsequently followed by the return of the disease, terminating fatally. The case happened with a lad of Swedish extraction, about sixteen years of age. The original disease had taken its course through several years, terminating in fibrous anehylosis of the joint and malposition of the femur, when the patient was about ten years old. Aside from the existing impediment to locomotion, he had not been troubled for six years, when

he fell down stairs and thus forcibly broke the existing adhesions. Violent suppuration followed the accident, and destroyed life by pyaemia. Having secured the specimen (Fig. 15), I had the rare opportunity of satisfying



(Fig. 15.)

my curiosity in a pathological point of view. It is astonishing to me how little destruction has been effected by the late suppuration. All the adhesions have been of course carried off, and the bony surfaces in contact with each other are osteoporotic, which is probably the normal condition in connection with the formation of fibrous adhesions. The caput femoris is of course destroyed by the original disease, but the neck has suffered no changes by suppuration since its articulating surface accurately fits in the socket.

I have mentioned these two cases for the purpose of showing that brisement force of the anchylosed hip joint is a proceeding not altogether devoid of danger. Nevertheless it is a legitimate operation if performed with due precaution, but the most brilliant results cannot compare with those attainable at the knee and elbow joints.

The previous division of the contracted muscles is to be insisted upon. Myotomy is not only harmless and indispensable to a satisfactory result, it lends also protection against the recurrence of the previous morbus coxarius; and I feel persuaded that Buehring would have had better chances to save his patient had he not omitted that initiatory operation. A few days after the operation we may then proceed to loosen the joint. The patient is to be placed upon the table in the recumbent posture, and when under the full influence of chloroform his pelvis is held by an assistant grasping both sides, with the thumbs upon the anterior superior pinous process of the ilium, whilst the operator presses firmly his foot against the corresponding tuber ischii. Thus prepared, he takes hold of

the affected extremity, and with a firm, steady, but gentle traction, extends and abducts the limb. Gentle motions and rotations may be combined with the traction, but they should never be made so powerful or free as to destroy the existing adhesions. We ought to be contented with a good position of the extremity, and not to risk the lives of our patient for the sake of more or less free motion.

In adults there is less danger of recurring disease, and their limbs bear a freer handling.

The fixing of the pelvis is obviously very important to the ulterior results, and the hands of an assistant fail particularly then to fix the pelvis when the thigh is considerably flexed upon the former, for this and the purposes of after treatment, a special apparatus is needed.

Buehring, and subsequently B. Langenbeck, have constructed such apparatus, but they are costly, complicated, cumbersome and inefficient. After various changes and improvements I have succeeded in constructing an apparatus which meets all the requirements, besides being cheap and simple, and may be attached to a plain camp bedstead. The apparatus which I submit to your inspection is much more costly than is neces-



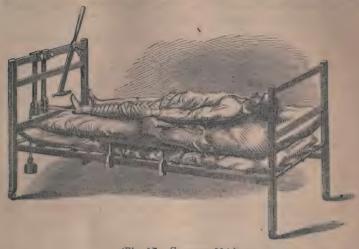
sary (Fig. 16). The essential part of the contrivance is a wooden block accurately adapted to the posterior half of the pelvis, inclusive of the tuber ischii. Any wood carver can make it if you furnish him a plaster of Paris cast. This block is simply lined with chamois, and, if well

adapted, the patient can lie in the same for months with the same convenience and ease with which a gum plate with artificial teeth may be worn. When the patient is placed in this block he is fastened down by stout leatherstraps and buckles, in front and across the pelvis. This block is fixed to a plate of sheet iron by means of screws from below; and the iron plate, by means of four bolts, to the frame of the bedstead. Thus you have a simple and complete fixture of the pelvis which lies closely upon the mattress. (Fig. 17.) All that remains is an iron frame at the foot of the bedstead, and two pulleys to shift upon the frame.

This apparatus should be in readiness when proceeding with brisement force, and if need be, may at once be used in place of the table and in preference to the manual fixing of the polvis.

If you should not succeed in completely extending and abducting the extremity, you may defer the completion and in the meantime keep the limb in the same position in which your first attempt left it, by pulley

and weight, or if you have completely succeeded, the after-treatment may at once be fairly commenced. In these cases extension comes in for its profitable employment. Without myotomy and brisement force it is more than worthless because dangerous; in combination with those pre-



(Fig. 17. See page 294.)

liminaries it is a most useful auxiliary. Extension with the aid of my apparatus is certainly most efficient and powerful, since the pelvis is completely fixed, and the patient totally prevented from assuming an accomodating position.

I have used it with great benefit in a large number of cases, and know no better substitute.

Two or three months will suffice to render the newly acquired position stable; then you may allow locomotion with the assistance of my portative hip apparatus, with or without crutches as required.

The true bony anchylosis of the hip joint finds its relief in Rhea Barton's operation. I have never had occasion to perform it, and can therefore offer no suggestions drawn from personal experience, but it would seem to me that the attempt at establishing an artificial joint at the line of division is unwarrantable for two reasons: 1st. An artificial joint could never give a sufficient support to the superstructure of the body. 2nd. It inevitably protracts the suppuration with its impending danger of pyamia.

Sayre, a few years ago, performed this operation, as he alleged with success, but his patient nevertheless died a few months after from pyæmia.

The specimen derived from the case, did not sustain the assertion of that gentleman, no cartilaginous covering, synovial lining or a new capsular ligament having been formed.

Now, gentlemen, I have arrived at the end of our discourse and will finish with relating a few interesting cases. Some of them present peculiar and exceptional clinical features, others may serve as types of their class. Your attention has been most gratifying to me and I feel sincerely thankful for your magnanimous indulgence.

## CASE I.

Hygroma bursale traumaticum, of eight years standing, fibrous anchylosis of left knee joint with flexed and inverted malposition. (Fig. 18 and vide fig. 12.)



A young man (Packner) twenty two years old, solicited my professional services in the following case: When at the age of 11 years he sustained an injury to the left knee, which gave him trouble for three years, not materially impeding, however, his locomotion. His general health having materially suffered, his father, a seacaptain, was advised to take the patient on a voyage and give him the benefit of seaair. On ship board he repeatedly met with falls and slight accidents without being aggravated. One day whilst driving a nail into a plank, the hammer struck him heavily just above the left knee-joint and caused a painful bruise, soon followed by intense agony and swelling.

From that time to the period when I took charge of his case, the patient had never been free from pain and uneasiness,

and his haggard, anxious, and desponding appearance bore the unmistakable evidence of severe and continuous suffering. The affected articulation was so tender as to be utterly useless for locomotion; in fact he would not even stand upon the extremity with a mere fraction of the bodily weight put upon it. Hence crutches were requisite, between which the extremity was suspended.

The wealthy father had of course successively consulted the best sur-

geons he could find, both in Europe and on this continent. They had all agreed in their counsel that amputation was the only remedy.

On examining the affected extremity the following clinical points were elicited:

- 1. An ovally shaped, smooth and throughout, hard tumor, " $9\times4$ ," inches located immediately above the knee-joint. Its base was broad, abrupt and immovable. There was no tenderness or discoloration about the tumor;
- 2. The joint was anchylosed but allowed a trifle of motion, which was, however, very painful at its inner circumference;
- 3. The quadriceps muscle of the thigh was displaced to the outside of the tumor; the patella lodged upon and adhered to the external condyle of the femur;
- 4. The tibia occupied an angle of 150° with the femur, and was so turned on its axis as to evert the toes;
- 5. Besides there was a slight inflexion at the knee between the two bones which gave it a knock-kneed appearance;
- 6. The biceps muscle was considerably shortened and therefore very tense;
- 7. The temperature of the knee-joint, more particularly at its inner aspect, was not much raised;
  - 8. In fine the affected extremity was moderately attenuated.

The tumor was obviously accountable for the existing articular trouble and malposition. It had raised up and gradually displaced the extensor muscles of the leg. The latter derived additional physical power from acting, as it were, around a pulley, being converted into a flexor, rotator and adductor muscle of the knee. The tibia had yielded to the abnormal traction. The torsion of the joint had set up inflammation of the synovial lining, eventuating in fibrous interarticular adhesion of the articular faces. Reflex contraction of the biceps muscle had ensued. Thus, by the succession of mechanical effects, a most complicated morbid condition had been brought about in course of time, traceable to no other cause than the tumor. The still existing inflammatory action at the inner circumference of the knee-joint, may be ascribed to the abnormal position of the extremity, being diagonal through the femur and bearing the weight of the body upon the internal ligaments.

But the all important diagnostic question centered itself upon the nature of the tumor! The apparently very hard texture suggested bony structure. For ostoid, the tumor was too hard and smooth, and had existed far too long a time to sustain the suspicion of a malignant growth. Periostitis would have circumvented the femur, and not

exhibit a broad and flat base. Bone abscess would have distended the femoral tube in all directions and at that size would have become softened. The hardness and smoothness of its surface precluded the idea of an osteo-sarcoma.

The evidently traumatic cause, the gradual increase, the regular form of the tumor, and the anatomical region, pointed directly and conjointly to the distension of the subcrural bursa. Yet there was no fluctuation, and that ominous hardness was left unaccounted for. Nothwithstanding the discrepancy, I commenced most carefully to explore my ground with the hope of detecting fluctuation; for the rather indefinite supposition suggested itself, that the resistance of the vagina femoris might render the tumor both hard and obscure its fluctuation.

At the inner and lower aspect of the growth, a branch of the saphena magna perforated the aponeurosis and dipped into the depth. There I felt some elasticity and very indistinct fluctuation, sufficient evidence of fluid, at any rate, to warrant explorative puncture. The patient, a very intelligent young man, having realized the probable character of his case, and deriving new hope from the proposed proceeding, readily consented to the exploration.

After having made the necessary preparation, I proceeded next day, with some professional friends, to the patient's dwelling. I met with but little encouragement for the operation, either on the part of colleagues or the relatives of the patient. The former dissented in toto from the suggestive diagnosis, and the latter presented the authority of the best surgeons of the country as objection to any other proceeding short of amputation of the thigh.

The trocar being inserted, about  $\overline{z}$  xiv of a straw-coloured and alkaline fluid was withdrawn, whereupon the tumor collapsed. On careful examination, the empty sac and its contours could still be discerned; but, of course, the previous hardness had entirely vanished.

Having thus verified the diagnosis, I proceeded with the second part of the programme, in dividing the outer hamstring, breaking up all articular adhesions, and in fully extending the extremity. A few minutes served to change the condition of the patient, and infuse him and his friends with new hopes for the future. It could hardly be anticipated that pressure alone would suffice to prevent the re-accumulation of the bursal fluid. In order to close up the old depot, I was induced to inject tincture of iodine.

That operation was followed with violent inflammation and suppuration of the bursa. When, at last, the cavity had closed, the quadriceps muscle was so firmly aglutinated to the thigh-bone, that it seemed indifferent

whether the articulation of the knee-joint was re-established or not. The patient, desirous for active life, declared himself quite contented with a straight, useful, and painless, though inflexible extremity, with which he is now able. according to a recent letter to a friend, to walk his forty miles a day, by peddling in California.

The presented photograph fig. 12 is the appearance of the patient at his discharge. At that time I supported his extremity with a straight ap-

paratus, with which the patient now dispenses.

That the hardness of the tumor was simply caused by the constraint and resistance of the vagina femoris, will be admitted without further dispute. And we noticed the same symptom in the case of Mr. A., one of the great hotel proprietors of New York. We need hardly say that the correct treatment of Mr. A.'s case depended likewise on correct discernment of the tumor, about whose character and structure conflicting opinions and apprehensions had been advanced.

## CASE II.

Traumatic diastasis of the lower epiphysis of left femur. Remarkable deformity and malposition of the knee-joints. Abnormal lateral mobility. Total resection. Recovery.

Francis Shaw, a lad of fourteen years, of Irish descent, and endowed with robust health, presented himself in October 1860, at the clinic of the Brooklyn Medical and Surgical Institute. He came at the instigation of a surgical instrument maker to get my advice with reference to the feasibility of a mechanical apparatus to steady and support his limb, and to render it useful for locomotion. He stated that he had acquired the deformity when but seven years old, and that ever since the trouble had increased, and that then he was unable to use his extremity to any purpose. To the best of his memory he received a blow at the knee-joint with an iron rod, which gave him pain and disabled him for a short time. A physician had been called in soon after the injury, but finding no undue mobility or deformity he pronounced it a simple contusion, and advised rest and cold fomentations. These directions were followed for three weeks, when the patient resumed his walk.

Since that time dates the impediment. In the creet posture, the patient throws his whole weight upon the sound member, when balanced between two chairs a three inch block is required to equalise the length of both extremities, as may be seen in the adjoining diagram (Fig. 19). The left limb is peculiarly knock-kneed, the thigh being adducted, the leg abducted and everted, and laterally both forming an angle of 120°. This position alone would have been quite sufficient to render locomotion infirm

and defective, but as it was, the limb became totally useless by the relaxation of the knee joint. At the moment the patient rested upon the affected extremity, the leg became still more abducted and everted, and the angle with the thigh could easily be reduced to 80° and less. Both



(Fig. 19. See page 299.)

articular faces moved with undue freedom over each other, and the tibia could be freely rotated upon the femur, the scope of eversion being, however, greater. This abnormal condition was due to some remarkable anatomical changes in the configuration of the joint. The articular surface of the femur had an oblique direction, from below and inward to up and outward, the two condyles were absent, and the bone terminated below as a segment of a sphere, of which but a part was appropriated for articulating purposes, the patella and the quadriceps muscle were drawn out of position towards the outer aspect of the extremity. The tendon of the biceps muscle occupied the popliteal space. In every other respect the limb presented the ordinary condition, except being slightly attenuated.

Before the patient had applied to our institution he had presented himself before the surgical staff of the New-York City Hospital, who had come to the conclusion to advise mechanical support which was, however, entirely out of the question. On the other hand Francis Shaw had arrived at an age which made him desirous of entering upon some business, and therefore insisted upon some means to render his limb serviceable. There was nothing left but the exsection of the knee joint or amputation of the thigh; for no orthopedic treatment could be relied upon to materially alter the anatomical status.

I could not hesitate to decide in favour of exsection, since both the constitution of the lad as well as the bony structure concerned, were in a most auspicious condition. The operation was performed on the 9th of October. I had to remove quite a large piece from the femur so as to obtain a rectangular surface; but a very thin slice was taken from the tibia, the patella was likewise removed. The bones were then brought in close proximity and kept in position by softened iron wire, and the

wound united by silver wire in fine, the limb was secured in one of the iron splints (vide fig. 10) which left the knee-joint itself free of access. Recovery followed rapidly, partly by first intention. The bone wire was removed on the twenty sixth day after the operation, and at the end of the second month the patient was up and about, and accompanied me on crutches to a neighbouring gallery to have his photograph taken. Represented in (Fig. 20.)

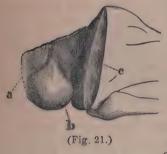
On the 28th Feb. 1861, I exhibited Francis Shaw at the New-York Pathological society, when his conditions were as follows: integuments, completely cicatrized; firm union of the bones by short fibrous tissues admitting but of scanty motion; moderate enlargement of the circumference; circulation and temperature normal; deficiency in length two inches; correct position of the foot. With a heel of two and a quarter inches, pelvis and shoulders stand square. His locomotion was, aside from the stiffness of his knee, unimpeded.

(Fig. 20.) from the stiffness of his knee, unimpeded.
You may imagine that the diagnosis of the case must have been per-

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plexing, when the most distinguished surgeons of New York signally failed to realize it, nor could I lay any claim to a clear understanding of the proximate cause in the premises before the operation, yet I have the gratification to say that the views I had first formed and expressed to my class, did not fall short of the reality.

That the injury to Francis Shaw had produced no fracture was self-evident from the previous history so clearly related. Nevertheless the continuity of the femur must have suffered in such a manner as not to disturb the form of the limb, nor give rise to any undue mobility. With diastasis of the lower femoral epiphysis these conditions are compatible. Had the patient quietly remained in bed for six or eight weeks, there is no doubt that the subsequent trouble would have been averted. But in rising prematurely, the soft agglutination of the epiphysis with the shaft gave way and allowed the former to turn gradually round, and with it dislodge the entire joint. In the newly acquired position the undue pressure upon the external condyle of the femur had gradually diminished its size until no trace was left. And the internal condyle became the terminating end of the femur. The fragments of bone removed by the operation (fig. 21 and 22\*), render this reasoning at least plausible if not conclusive.





CASE III.

Morbus Coxarius in its third stage. Consecutive Abscess connecting with the joint.—Complete prevention of malposition.

George D., ten years old, of good constitution and general health, descending from healthy parents, and one of nine children who are enjoying perfect health, came twenty months ago under my treatment. His

<sup>\*</sup> a. Epiphyseal line.

b. Internal condyle of femur.

e. Slice of tibia.

Fig. 22, represents the posterior view.

left hip-joint was then very tender and immovable, the extremity was slightly bent upon the pelvis, abducted and rotated with eversion of the toes. The pelvis was lowered at the affected side, and the spine consequently inclined the same way. On examination under chloroformit was found that the hip-joint was almost immovable, allowing but slight flexion and extension, but no adduction and rotation whatsoever. The tensor vaginæ femoris and the pectinæus muscle contracted.

There was but a moderate fluctuation at the joint. In addition to this I was informed that the patient complained of pain at the knee and violent nocturnal paroxysms. The limb was moderately attenuated. Although the boy had manifested the symptoms of morbus coxarius but a very short time, he gave evidence of constitutional suffering, looked pale and thin. A fall directly upon the left hip, was assigned as the ostensible cause of this disease.

These symptoms strictly coincided with the second stage of morbus coxarius.

The treatment was initiated with leeches to the affected articulation. The contracted muscles were thereupon divided and the patient was placed in the wire apparatus, and thus rest and position of the extremity insured.

The immediate effect of this treatment manifested itself in complete repose and immunity from pain, both structural and reflected. This treatment was continued for six months, when again a thorough examination was instituted. There was almost complete mobility, without crepitus; no fluctuation about the joint; the limb occupies a rectangular position to the pelvis. There was no pain on pressure or motion. The constitutional appearance of the patient was notably improved, appetite and rest were perfect.

Presuming that the disease had been effectually arrested, I allowed the patient one hour's locomotion per day, with the hip splint and crutches, and this time to be gradually prolonged provided no active symptoms should recur. During the balance of the day and the night, in the recumbent posture, and the limb again secured as before. There was no reason to alter the plan, and at the end of another six months he enjoyed his full freedom and went regularly to school, crutches and portative apparatus, as well as the wire apparatus during the night, being continued.

About four months ago, an abscess formed over the place where the tensor vaginæ femoris had been divided, and was attended with the ordinary signs. It was punctured, evacuated, and its walls kept compressed by flannel bandage; since then it has three times refilled and again been punctured. Each time the wound closed. The matter drawn from the

abscess was rather thin and somewhat soapy, containing, however, no structural detritus of any account, and particularly no elements of bone. I am rather undecided as to the nature and meaning of the abscess, and have no means of ascertaining whether it connects with the joint or is the consequence of suppurative bursitis. There is indeed not a single symptom indicative of the joint being implicated, although the possibility cannot be denied. But the fact that the punctures close and form no sinuses, is rather against articular suppuration. It is at best therefore an open question.

On the other hand I have seen these abscesses often form at the same location, and subsequent to the division of the tensor vaginæ femoris. Not unlikely these abscesses grow out of an injury to the bursa of that muscle, and would have no great pathological import. If this version should prove true, the diagnosis of this case should be modified accordingly. From the general aspect of the case, I expect perfect recovery at no distant time. The diagrams (figs. 23—24) represent the present







(Fig. 24.)

status of my patient in as far as the position of the affected limb is concerned, and it will be observed that form, position, and length are normal, not even the circumference of the limb differs materially with its fellow.

## CASE IV.

Malposition of the right limb with more than four inches shortening, the result of now extinct Hip Disease.

Harry M., eleven years of age, came under my charge in the following condition. The right extremity considerably attenuated; the thigh without its proper contours; extreme adduction and inversion; pelvis tilted up and rotated backward; corresponding deflection of the spine; gait very awkward and limping, in spite of a four inch heeled boot; trochanter major protrudes considerably, and exceeds by three quarters of an inch a line drawn between the anterior superior spinous process of the ilium and the tuber ischii; insignificant mobility of the articulation, without a trace of abduction and rotation.

These impediments were the consequences of morbus coxarius, since eighteen months entirely extinct.

Although of slender build, he had enjoyed perfect health, and been a very active boy up to the very time when he was suddenly struck down with that disease.

There is no morbid diathesis in the family; the father of the patient is even a very robust, muscular and active man, the very picture of health and manliness. In addition to this the patient has been, and is still, surrounded with the attributes of opulence and rational hygiene. The premonitory symptoms were but few, insignificant and of short duration. When at a boarding school in the country the patient was suddenly attacked with the most violent symptoms of morbus coxarius, which continued with unabated intensity for five months; then they almost as abruptly abated, leaving the patient in that deformed state which I have briefly sketched. But the shortening had steadily increased so as to require from time to time a higher heel to his boot. Even during the 6 months preceding the operation, the increasing shortening of the limb had been observed. He had, however, completely regained his standard of excellent constitutional health, and was as active as before. There were no local symptoms indicative of continued joint disease.

I have not been able to ascertain the cause of the original attack. There is certainly no pretence of constitutional causation, although the patient does not remember having met with any accident worth speaking of. I, nevertheless, consider myself justified in assuming the same, for the very activity of the patient seems to warrant such a supposition, still more so the violent character of the disease and its rapid course without suppuration.

The patient came under my treatment in the spring of this year, and remained four months with me. During this time I have divided suc-

cessively most of the adductor muscles; and at four different occasions, with the assistance of chloroform, broken down most fibrous adhesions, and by steady extension in the recumbent posture and repeated passive motions, I have succeeded in placing the affected extremity in a rectangular position to the pelvis, and extended and loosened the still existing fibrous impediments to such a degree as to allow moderate mobility of the articulation.

From the high position and prominence of the larger trochanter, it is evident, that the neck of the femur rides upon and is fastened to a new articular facet at the superior and posterior portion of the acetabular margin, where it still remains, and from which position I do not intend to displace it. At the end of the second month I allowed locomotion to the patient, supported by crutches and my first hip apparatus. It was at that time that the photographs (figs. 24 and 5) were taken. You may judge for



yourselves of the material changes towards improvement which had been effected up to this time. Previous to his discharge, another photograph with the second hip instrument applied, was obtained, (vide fig. 7). In that position the pelvis has resumed its proper level, the extremity stands rect-angularly, within five eighths of an inch off the floor. The passive motions are still continued with due care, and daily lubrications are being made with phosphorated oil, to promote healthful innervation and nutri-

The patient is directed to wear the hip instrument night and day until the changes of form and position become per-

manent, when a heel  $\frac{5}{8}$  of an inch higher than that of the other boot, will suffice to ensure easy gait and locomotion.

These changes have been wrought within the short period of four months in a deformity and malposition which in former times were considered beyond surgical aid, and this case furnishes, therefore, an illustration of the grand progress in orthopædic surgery.

Brooklyn, N.Y., Clinton, corner of Warren steeet.

Some Remarks upon Carbolic Acid as a remedial agent in the Treatment of Wounds. By W. Canniff, M. D., M.R.C.S., England, Formerly Professor of Surgery and General Pathology, Victoria University, Toronto, Ontario.

During the past year the Profession has been favoured by Joseph Lister, F. R. S., Professor of Surgery in the University of Glasgow, with several papers upon the subject of carbolic acid in the treatment of wounds. In this paper it is intended to offer some remarks upon the views advanced by Professor Lister.

His treatment of wounds by the application of carbolic acid, is based upon the discoveries claimed to have been made by M. Paster, namely—I quote from Lister—"that the septic properties of the atmosphere depends not on the oxygen or any gaseous combinations, but on minute organisms suspended in it, which owe their energy to their vitality—it occurred to me, says Professor Lister, that decomposition might be avoided by excluding the air, by applying as a dressing some material capable of destroying the life of the floating particles. The material which I have employed is carbolic or phenic acid, a volatile organic compound, which appears to exercise a peculiarly destructive influence upon low forms of life."

He recommends it in all forms of wounds, a weak solution in the incised wound, and in contused wounds, especially in compound fractures in much greater strength. It is likewise used in the treatment of chronic abscess to prevent decomposition of the pus after an opening has been made.

To read Professor Lister's remarks, his inferences, one would almost think that a Paget had never written upon the *Healing Process*, nor a Hilton expounded the invaluable benefits of rest in the treatment of wounds and abscesses.

Before proceeding with my remarks I wish to make one broad statement, viz, that nature has endowed the system with the power to heal, to make extraordinary, as well as ordinary repair of tissue. In every case where there has been a solution of continuity, an effort is at once made to effect a healing of the breach. And the assertion is ventured that there exists a material, prepared solely for the purpose of healing; I refer to the fibrine of the blood. This point, which I believe has never been urged, never indeed stated, but by myself, I have endeavoured to make plain in my "Manual of the Principles of Surgery." Of course there are circumstances which will successfully hinder the natural process of healing. These may be local or general, and it becomes the surgeon's office to remove these untoward conditions, if within the bounds of possibility.

Take a simple incised wound, where the part has been divided without injury to the neighbouring tissues, on either surface of the wound. If the individual is in health that wound will readily heal by adhesion, however extensive it may be, if the surfaces be brought together and retained fully at rest. If anything intervenes between the surfaces of the wound, or if the part be not kept in a state of rest, they will not unite immediately. Such is the case whether the air is excluded or not, provided always that the part is retained in a physiological condition by the application of moisture and cold sufficient to prevent undue circulalation of blood. I will relate a case which was under my own care. A man in good health, although addicted to slight intemperance, met with a railroad accident by which his hand was severed from his body. Amputation was performed three inches below the elbow by the circular operation. The integument forming the flaps was uninjured; but some of the soft parts had to be trimmed off, because of bruising; two ligatures were employed, and the stump closed by the introduction of sutures placed not more than half an inch apart, a few adhesive straps were also used, a bandage was then applied around the stump sufficiently snug to keep the parts immovable; the end of the stump was uncovered, except by the few adhesive straps. The limb was placed in a slightly elevated position, and cold water dressing applied, no pains being taken to exclude the air. About thirty-six hours after, every second suture was removed. The following day all but two of the stitches were taken away, and the day after all were abstracted, and adhesive straps alone continued to support the edges of the wound while the bandage was still snugly applied around the arm immediately by the end. Cold water was used to prevent exalted circulation, being applied by dipping a piece of folded cotton in the water from time to time, and laying it upon the part. It soon became evident that immediate union had taken place in the whole extent of the wound, not a drop of pus had formed, although there had been a continual oozing of liquor sanguinis. The two ligatures remained imbedded in the tissues for nearly three months before suppuration took place along their tract, which after another month resulted in their evulsion. Had acupressure, as recommended by Sir James Simpson, been practiced, this after-trouble would not have come. Now, here was a large wound, an amputation of a large muscular arm, no care was taken to exclude the air; on the contrary, the wound remained open, with the integument turned back for some time until the bleeding had entirely ceased. There was plenty of time for the air to deposit any number of organisms. Subsequently the surface of the wounds were left uncovered, and yet there was complete immediate

union. I will refer to another case in my own practice, in which resection of the ankle-joint was performed, and the unusual amount of two inches of bone was removed from the extremities of the tibia and fibula. A few days subsequent to the operation, a large portion of the integument -a cicatrix of a recent wound-sloughed away. From first to last nothing but water dressing was used. The wound in its whole extent was, from the first, left uncovered. The air was constantly circulating around the part, and after the slough came away it entered the large excavation every time the cloth was dipped in water, which was very often. Week after week the depth of the wound was exposed and the ends of the bones were daily seen, bathed with liquid fibrine, beneath which the work of repair steadily progressed. Eventually nature's work was complete, and the bones of the leg were rejoined to those of the foot. The air was ever present; yet only a very small quantity of pus was at any time elaborated, and this was at the bottom of the ankle where it was impossible to secure a free escape of fluid. Now, if air is so pernicious by the presence of low forms of life, why did it not in this case produce its disastrous effects? These two cases are here adduced to show that healing will successfully, and to a remarkable extent take place, when the air is directly and constantly in contact with the discharge continually poured out. The presence of air affects not the healing process; but if the air be foul, loaded with the animal poison derived from the decomposition of the discharge which is pent up by the application of numerous coverings and bandages, with the view of excluding the air, then the simple, but grand work of repair is stayed and the framework—the coagulated fibrine, is undermined and instead of material being poured out to effect repair, poison will be absorbed. And hence may follow serious blood poisoning.

But it is in cases of compound fractures, those cases of severe crushing or laceration where blood poisoning is more likely to follow that Prof. Lister thinks the carbolic acid is pre-eminently beneficial. For in these cases it would seem that the low organims act with greater power. The fact is ignored that in these severe injuries, not only is there a wound but the tissues on either hand are crushed. The cells which go to make up the whole structures have suffered, and are in a low state of vitality, perhaps are dying, or already dead. With many it is a question whether life can be restored or not. Here nature has not alone to close up a wound but to give back life to tissue in a state of collapse. Instead of standing ready to pour out the fibrine to seal up the divided tissue, it has to wait itself for help. Some of the structures have been so far injured that restoration is im ossible; they must die, and have to be sequestrated from that which

is enabled to live. This all involves a more tedious and complicated process, and the circumstances of one, with such a wound, is far less hopeful. In these cases the dark grumous fluid wells slowly but incessantly from any side. Yet we are told that here is a favourable chance for the mischievous little animals floating in the air, to commit depredations.

Now it is respectfully submitted that it is the crushed tissues which give the dangerous character in these cases, and that the air carries no additional poison however much it may circulate. And it is difficult to understand how carbolic acid, even supposing it has killed the organisms, can help the unfortunate cells, which compass the tissues and which are bruised and bleeding. But this can be understood, that the ultimate particles of the system have the power to recupurate—to recover from a shock somewhat the same as one who has been precipitated headlong among the debris of a falling building, and who lies stunned and, for a time, senseless. If, however, some of the tissues die and remain in the wound, because bandages have been so applied that air shall not enter, or if the position is unfavourable so that no fluid can flow out of the wound, then dead particles remain there to decompose and to be absorbed, thereby producing Pyemia, or some other blood poison. I can understand that carbolic acid, or a more potent caustic might by forming an escar of this dying tissue tend to prevent that fatal result. But is this necessary? I have no hesitation in saying no. In a healthy subject, by placing the patient, especially the part injured, in a proper position, so as to prevent an accumulation of fluid in the part, by applying judicious and general pressure; by keeping the parts clean, so that no dead matter may remain to be absorbed, by allowing clean air, also, to approach and give its puryfying influence. then the effects will be as salutary and invigorating as is pure air to one who has been confined in a dungeon, and as grateful as the limpid stream to the weary traveller with sore and bleeding feet. The belief that if air entered the cavity of a joint or any closed sac, the most disastrous results would be sure to follow, has now quite exploded. So should we discard the idea that air-pure fresh air-is such an evil agent in connection with wounds. It is not argued that air may not be productive of harm, and that healing of injured tissues will not more quickly take place as in subcutaneous section; but it is contested that carbolic acid is not necessary to enable nature to take any necessary step to restore a part crushed and wounded.

Then with respect to chronic abscess, Prof. Lister has given a very elaborate way whereby carbolic acid may be made to prevent the entrance of air into an opened abscess, or render inert the floating organisms. It is a fact well known that oftentimes after a chronic abscess has been open-

ed and a quantity of pus discharged, which was inodorous, and the opening made to close up, that when again opened foetid pus would escape, while hectic symptoms would present themselves. But is it because of organisms introduced by the air? Rather is it not because the abscess was closed and air pent up which led to a decomposition of degenerating pus which would otherwise have gradually dissolved and been absorbed. It must be remembered that a collection of pus necessarily presses aside the natural tissues; now these structures will tend to return to their natural position when pressure is removed, and my practice has been to make a direct opening large enough to allow a free escape; but not to evacuate the ab-The patient was placed in a comfortable and natural position beforehand, so that no motion of the body would expel the contents; a poultice applied soothed the part and prevented the closing of the incision; but no tent was introduced. The result invariably has been satisfactory; the structures gradually returning to their natural position, pressed out the pus, yet not so quickly as to make room for air to enter. Should the air find an entrance I would make a passage sufficiently large that a change of air could be had by the contracting pyogenic membrane; then there is no decomposition, no evil results. Of course in these cases rest to the parts is an absolute necessity.

Remarkable case of Hyperthrophy of the neck of the uterus impeding labour. By E. D. Worthington, A.M., M.D.

Julie D—, a French Canadian, of most exemplary character, is now 36 years of age, has been married 13 years, slight, well formed and remarkably healthy. Never had any uterine disease other than that I am about to describe; 12 years ago she gave birth—at the seventh month—to her first child, which weighed only  $2\frac{1}{2}$ lbs. The boy is now alive. She was living at Nicolet at the time, and was attended by the late Dr. Brassard. She assures me that that first labour of hers was the most severe and protracted one she ever had, and that she nearly died before the child was born. I have attended her in five confinements since that time, all the children except the last one, being still born.

1857. June 20. She was delivered of a boy. Nothing particular to characterize this labour, except that the fœtus was small, had been dead for some days, and that I was reluctantly obliged to deliver with the forceps. If any abnormal condition of the neck of the uterus existed at that time I did not notice it. She had been in labour for some hours when I saw her, and had been flooding more or less for several days before.

1858: Nov 13. Julie sent for me early in the morning. The pains were then very severe, and she had been suffering a good deal all night. On examination found the cervix so swollen and elongated as to fill up a considerable portion of the vagina. The finger could be passed readily round the neck in every direction, but I had some difficulty in finding the os. It was at the apex of the abnormal enlargement-almost at the external labia—and the finger naturally went beyond this point, and was moved about in fruitless efforts to discover an opening. One finger could be introduced one and a half inches into the cervix, its walls for that distance being firm, thick and unvielding, but it was impossible to pass the finger higher up. From the vagina I could through the wall of the uterus very indistinctly feel the rounded form of the head of the fœtus; I could ascertain this, and nothing more. The woman was undoubtedly at the full period. Long continued pressure on the undilated cervix between the feetal head and the bones of the pelvis might account for a good deal of the swelling of the os, but not for the elongation of the cervix. The case was rather puzzling. However, as every thing was to be gained by delay I gave her a full dose of Opium, raised the hips, introduced a piece of sponge wet in tepid milk and water into the os, and a larger piece into the vagina, pressing up the mass as well as I could, and directing an attendant to make gentle pressure over the labia and perineum. Saw her frequently during the day, and remained with her all night; continued the sponges-gave Opiate enemata-applied Belladonna to the os, and kept her occasionally under the influence of Chloroform. Towards morning the head could be felt. The os and cervix more yielding. Could pass two fingers up to the head. Sent for Dr. Brooks but he did not arrive until noon. At that time the os was still more dilated, and the head descending, but even then so remarkable was the state of the parts that I was rather amused at Dr. Brook's uninitiated efforts to find the os. Our patient was now getting anxious and exhausted, and cried out piteously for us to use 'les fer' and relieve her of her sufferings. This we promised to do as soon as the os was sufficiently dilated to admit of their application, which was not until 4 o'clock in the afternoon.

The forceps were applied without any great difficulty, but it was found impossible to move the head. After repeated efforts we were certain that delivery could not be effected, except by craniotomy, and as at this time we could not hear the fœtal circulation, we performed that operation unhesitatingly, and delivered our poor patient of a fœtus fully up to 12 pounds in weight. Her recovery was rapid.

Convinced at the termination of the labour, that its long duration,

and unfavourable result to the child, was due not so much to its size, as to the elongation and unyielding state of the cervix, I told Julie that if ever she should become *enceint* again, she must let me know about the seventh month. In the event of such an extremely probable contingency, if I found the cervix in the same state, I would bring on labour at that period. She promised, but did not keep her promise.

1861. January 30th. Julie sent for me in the evening about 6 o'clock. She and her husband were living on a farm of my father in law, two miles out of town. On my arrival I found exactly the same state of the cervix, except that it was softer and more dilated. The membranes had broken, and the feet were presenting. Julie had been a faithful servant in our family for many years, before and after her marriage; she was so kind and good, such a favourite with us all, so anxious to have another living child, her prayers being continually for a "little girl," but with the shocking bad taste of wishing it to have red hair, a sister for "Henri, he is so lonesome," that I determined to use to its utmost limit, all the prescribed caution, so that she might have the cherished object of her wishes. Alas! Julie's baby was born next morning at day-light, dead, as might be expected; but every sorrow has its solace, every cloud its silver lining, it was only a boy, and had black hair.

1865. My services were again required, for about the middle of July Julie left word with my wife that she was then seven months advanced in pregnancy and would like to see me when convenient. I saw her in a few days, she was then living in town. She at once called my attention to the extraordinary development of the cervix ;-a pinkish white, soft, round, fleshy, healthy looking mass; it hung down between the thighs like a huge penis, with no evidence of diseased action about it, but looking as if it was, "to the manor born." It had a circumference, of ten and three-quarter inches, ending rather abruptly in a rounded extremity, in the centre of which was a proportionately large, but otherwise orthodox os. It was seven inches in length, measuring from the labia. To give a familiar illustration it was as near as possible to the size of an ordinary three half pint black bottle, broken off short at the neck. Two fingers could be readily introduced within the os, but the canal gradually · narrowed, until at the length of the fore finger it abruptly became very small indeed, and at this point it was hard and unyielding. The outside covering resembled very thin cuticle rather than mucous membrane. The finger could be passed up the vagina by the side of the neek, and its point could just touch the junction of the neck with the uterus itself so that this monstrous cervix must have been at least ten inches in length. Julie then informed me that this " had been growing slowly since her first

confinement, that it gave her very little uneasiness, except of late years, and then only from its weight, that it was always larger when she was not pregnant, as pregnancy advanced it gradually receded, and during the latter months disappeared within the vagina. She had never spoken of it before, and begged her husband never to speak of it even to me, she was ashamed to allow any one to know of its existence. I then understood why I never could get any satisfactory account of it from her before, and why she had always been unwilling to have anything done for it. When lying on her back she could return about half of it, but on taking away her hand it immediately returned. She was more comfortable when it was down, for on pushing it up it made her feel so full. It had increased very much since her confinement in 1858, but had only attained its present great size within the last three years. Before she became pregnant this time she could return it within the vagina, when on her back, but only to a point bringing the os parallel with the external labia.

I cannot tell you how distressed I was on convincing myself that there was a feetus within the uterus, and that the apparently hopeless task of bringing the child through this long neck, or of performing the Cæsarean section were the only means of saving the life of my poor patient. attempt the former appeared to me then about as feasible as to pass a small feetus through a male urethra, or a 74 gun-ship through the Canal, and to do either would require a considerable amount of dilatation. Once at the request of a Catholic Priest I had performed the Cæsarean section immediately after death, and I have no peculiar weakness for repeating the operation at an earlier period. My only hope was in the admirable deficiency in sensitiveness that existed in this "horrid shape," so I immediately commenced a long, tiresome, but most persistent course of dilatation. Using no internal treatment other than was necessary to secure absolute quiet to the uterus, and prevent the beginning of labour until there was sufficient progress made to give hope of a favourable result.

It is unnecessary, and would be very tiresome, to go into a detailed account of a process that extended over a period of close upon two months. The means used were such as would naturally suggest themselves to any one, the operation being of a purely mechanical character. I may add, however, that after attaining a certain amount of dilatation, I found better results from the use of India rubber hollow balls, with long tubes attached of the same material, than from any other dilator. The ball was rolled up, introduced as high as I safely could through a speculum, and then forcibly filled with air, and allowed to remain for hours and then withdrawn.

At the end of the eighth month I could pass the whole hand up through that part of the neck external to the vagina, with comparative case. I then commenced to dilate within the vagina, and here I met with my greatest difficulty, suffice it to say that within a few days of the time when labour might be expected, I had succeeded beyond my most sanguine expectations in dilating to a point that could not be far removed from the internal mouth of the uterus. The case was of such an extraordinary character, that my friend Dr: Gilbert being in Sherbrooke about the time I was using simple sponge tents, I took him to see it, and my confrere Dr. Austin saw the case frequently with me during the whole process of dilatation. They both agreed that it was so remarkable in its character, as to deserve to be placed on record; and I only regret that a variety of causes have prevented my sending it to your pages before this time.

On the evening of the 16th September, symptoms of labour set in, and about 10 o'clock, as the pains were increasing, I determined to commence dilating the last remaining point of constriction in the neck of the uterus. I therefore rolled up, and passed fairly within the uterus, an india rubber ball of nine inches in circumference, of a conical form, at the junction of the ball with its long tube. In doing this I unavoidably ruptured the membranes, but a little traction on the tube prevented the escape of more than about an ounce of the liquor amnii. I did this believing that the conical neck of the air distended ball, kept constantly engaged in the internal os, would act as a wedge when acted upon from above by the pressure of the child's head; that this wedge dilator would act more directly and quicker in accomplishing the object I had in view, than could the larger and rounder surface of the head itself; and that when this ball was forced out of the uterus the pressure of the head would then tell with better effect. About daylight I sent for Dr. Austin, and just before he arrived the ball came through the cervix, followed by the discharge of the liquor amnii.

It would be safe to say that labour had now fairly commenced, its progress was slow and steady. I gave my patient chloroform, and a little after 10 o'clock in the forenoon, delivered her of a fine, healthy child.

I am sure that my last dilator was of the greatest possible service, and that it did not cause in itself the least suffering, but, on the contrary, saved many hours of weary agonizing pain—for when it came away the progress made by the head was very remarkable. Indeed, from this point-our greatest difficulty was in getting the head through that part of the neck outside the vagina, and I can assure the reader of this strange case, that the whole head had passed entirely outside of the vagina before even

the slightest portion of the scalp had passed the mouth of this most remarkably hypertrophied mass.

Modesty was put aside, and Dr. Austin and myself with well oiled hands, and the most tender careful manipulation slid the distended neck—stretched to its utmost tension—over the head. If it had been necessary I would have divided it,—slit it up—and perhaps I ought to have done so: but it was rather vascular; it might have given rise to troublesome bleeding, at a time when our patient might require every ounce of blood in her body;—and besides all this, such a proceeding did not at any time seem to be absolutely called for—a very good and satisfactory reason to me, at least.

The Placenta soon followed, and Julie had a good recovery. It is true that this neek lay inflamed and puinful—as much of it as could not be reduced—but cooling applications within a week brought this to its former condition. A few months ago poor Julie's baby died, and now, though she tells me she has not the slightest wish to have another child—fearing that, even if it should be born alive, she would have the additional misery of losing it—she is anxious at last to have something done to rid herself of this great annoyance. I saw her to-day that I might give some idea of its present size. She wears a bandage that keeps it pretty well up, but she cannot wear it all the time. The mass is certainly somewhat smaller than it was two years ago: otherwise it is unchanged. I would be very glad indeed if some one of more experience than myself would give me a hint as to treatment.

My own opinion is that amputation could be performed with safety by the ecraseur, or by ligature. There is very little room for the application of either, even if the patient and the husband would consent to operative interference, which they positively object to at present. The only thing that remains is to adapt a gutta percha or ivory body of a pyramidal shape, to a firm bandage, and to wear this constantly, introducing the smooth rounded point within the os, to keep it in position.

About the time of Julie's confinement I was called to see an old lady of 65, and as I sat chatting with her, her daughter in law said "Mamma, why do you not speak to the Doctor about that other thing? he might do something for you. "The old lady replied "Ah no, dear, nothing can be done for that I've had it ever since I left Ireland five and twenty years ago—when my John was a wee baby." She then allowed me to examine what was only a smaller edition of what I have just described; being in size equal to an ounce quinine bottle, and three and a half inches in length—outside of the vagina—thus giving additional testimony to the truth of the old adage that there is nothing new under the sun."

Sherbrooke, Dec. 2nd. 1867.

The Necessity of Supporting a Medical Journal in the Dominion of Canada. By Sir Duncan Gibb, Bart, M. D., L L. D.

Although being at a distance, and far away from the scene of one's early recollections, I am always deeply interested in the welfare of the Profession in Canada, and necessarily depend upon the only Medical Journal in that now extensive Dominion for information upon matters medical. The movement which led to the formation of a Canadian Medical Association is without exception the most important that has ever been brought before the notice of the profession in Canada, and all honour is due to my respected friend, Dr. Marsden of Quebec, as the originator of it. No more fitting place than Quebec could have been selected, for the inauguration of so important an undertaking, and the Medical Society of that City deserves its full measure of thanks in so ably bringing to perfection the original proposition of Dr. Marsden. The profession of this country have noted the formation of this association, and cordially wish it all the success it deserves, in carrying out the important measures which will be brought before it.

The magnitude and importance of the Canadian Medical Association have been made clear by the full details published in the Quebec papers, kindly forwarded to me by friends. My object in sending this short communication, is to ask the profession in Canada to unite and support a Journal, through the medium of which they may communicate with one another, and by means of which the profession will take that standing which exists in other countries. I have been astonished, as well as many others here, to find that in a large country like Canada, with its many thousands of practitioners, such a comparatively small number subscribe to the only Medical Journal in the country, and so few, indeed, very few, are Contributors. Why is this? It used not to be so, although I am free to admit that it never was what it ought to have been at any time. In England, Scotland, and Ireland, there is scarcely a practitioner of any grade, who does not subscribe to one Medical Journal at least, and in the large towns two or more are taken. In London alone, with its 2650 practitioners, a large proportion take the 3 regular weekly Journals, besides several others of a more or less scientific or general character. A great many take two; nearly all one. The consequence is that every one knows what is going on around him. The weekly journals are essentially Medico-political, and this is a feature of much greater importance to the general Medical reader, than original contributions alone.

Now it occurs to me—an impartial looker-on at a distance—that a quarto-journal, similar to the "Lancet" or "Medical Times," or like the

"British American Medical Journal" published from 1845 to 1850, with a white paper cover, and issued twice a month, of suitable thickness, would be the exact kind of periodical suited to the profession of the United Dominion of Canada. It would require an editor (like the present journal, and who should be the same respected individual), with a staff of assistants, for its various departments. Medical news from all quarters should be welcomed, and short communications upon various subjects. And if the profession are in earnest in their desire to co-operate for the general good, they should unanimously support a journal that would not only compare favourably with those of other countries, but that would command the respect of the profession throughout the world.

From the tendency of Medical legislation in this country, it is easy to see that applications from our Colonial Universities are by no means treated with the respect they are entitled to. And every petty corporate body here, with absolutely no advantages whatever, beyond the recognition of its certificates for registration entitling to practice, is looked upon as of more importance than any colonial institution, no matter how good, A well supported journal, representing the opinions of the Canadian profession, and giving the record of the proceedings of the Canadian Medical Association, moreover, being recognised by the Canadian Government as an organ reflecting the opinion of a great and influential body. would necessarily have such weight that measures intended for the benefit of the profession could be carried without any serious opposition. Without a well supported Medical organ, the Canadian Medical Association cannot exist! What would the British Medical Associationnow numbering its 3000 practitioners, scattered over the length and breadth of the land-be, without its Medical Journal? To be sure the Canadian Medical Association is different, as the journal would be published at private risk, nevertheless no difficulty need be apprehended on that score, if a large and voluntary subscription list be obtained.

I have been much impressed with the editorial article upon "The Medical Convention of Canada," in this Journal for October, and sincerely hope some good may come of it. I would humbly suggest that in every town and village in the Dominion of Canada, some person should be employed to canvass the profession for supporters of the Journal, and the subscriptions should or ought to be paid in advance, as is the general custom here.

The following is a list of the Medical Journals which have been published in Canada, and may be useful at any moment for reference.

The "Quebec Medical Journal." 2 Vols. 8vo. 1826 and 1827. Edited by Dr. Xavier Tessier.

- "Montreal Medical Gazette." 8vo. Vol. 1., 1844-45. Of Volume 2, only 2 numbers appeared. Edited by Drs. Badgley and Sutherland.
- The "British American Journal of Medical and Physical Science." 7
  Vols. 1845 to 1852. Published at Montreal. The first 5 Vols. 4to.
  and the 2 last, 8vo. The first two volumes edited by Drs. Hall and
  Macdonnell, the remainder by Dr. Hall alone.
- "La Lancette Canadienne," Journal Medico-chirurgical. Montreal, 1847. Folio. 12 numbers pp. 58, all ever published. Edited by Dr. Leprohon.
- The "Canada Medical Journal." 8vo. Montreal, edited by R. L. MacDonnell, M. D., and A. H. David, M. D., 1851 and 1852, 1 vol.
- The "Upper Canada Journal of Medical, Surgical and Physical Science." (New series) 8vo. Toronto, 1851 to 1855. 3 Volumes (?) Edited by Dr. Stratford. [I have not seen the old series.]
- The "Medical Chronicle, or Montreal Monthly Journal of Medicine and Surgery. 6 vols. 8vo. 1854-59. Edited by Drs. Wright and McCallum.
- "British American Medical Journal." Royal 8vo. Published at Montreal, 1860-62, 3 Vols. Edited by Dr. Archibald Hall.
- "Canada Lancet. Royal 8vo. 2 Vois. 1863 and 1864, Montreal. Edited by Dr. Bowman.
- The "Canada Medical Journal. 8vo. Montreal, 1865 onwards, and is now in its fourth vol. Edited by Drs. Fenwick and F. W. Campbell.
- "Gazette Medicale," Revue Meusuelli, Medico-Chirurgicle, 4 to. Mon treal, edited by Drs. Lemire and Dagenais, one volume published, 1866.

Bryanston Street, London, November 27th, 1867.

A Treatise on Human Physiology, Designed for the use of Students and Practitioners of Medicine. By John C. Dalton, M.D., Professor of Physiology and Microscopic Anatomy in the College of Physicians and Surgeons, New York, &c., &c., &c. Fourth Edition, revised, and enlarged, with two hundred and seventy-four illustrations, 8 vo. pp. 695. Philadelphia: Henry C. Lea, 1867.

In noticing the third edition of this work we remarked that the style was such as to render it not alone a book of study to the student or of reference to the medical practitioner, but a book which could be taken up and read at any time, with both pleasure and profit, and as affording delightful recreation from the labours of practice. We can heartily

endorse these views as applied to this the fourth edition, which has received from the hands of the author a thorough revision; indeed the progress of Physiology and the kindred sciences during the last few years has entailed this labour on our author. This progress has not necessitated any decided change in the views entertained in any of the departments of this science; still there has been great activity in investigation in different directions, and as a result many new features have arisen in Physiological knowledge. Improvements in Mincroscopical and other instruments have added much to the general store, and by aid of these means, Helmholtz and others have been able to note the physical changes in the eve during vision at different distances.

In the revision and additions to the present volume the author has incorporated the changes in physiological knowledge with the mass of the text, so as not to essentially alter the general plan of the work. Due attention is given to the investigations of J. Lockhart Clarke on the grey substance of the spinal marrow, and also to remarks of Dr. John Dean on the Medulla oblongata, these investigations have placed our knowledge of the structure of the spinal cord and base of the brain in a new light, which is of the greatest possible importance to the physiology of these pacts. The discoveries of Virchou, Leuckart, and others on the structure and history of parasitic animals affecting the domestic quadrupeds and man, are duly noticed. Several new illustrations have been added to this edition, and of these we may remark they are clear and distinct, finished in the highest style of art.

The well earned reputation of Dr. Dalton as a Physiologist is sufficiently extensive, and his book has for years deservedly occupied the place in our colleges as the text book on this branch of Medical Literature; the paper is of the best quality and the type clear and well impressed, it is to be procured of Dawson Brothers Great St. James Street.

Injuries of the Eye, Orbit, and Eyelids; their immediate and remote effects. By George Lawson, F.R.C.S., Eng., Assistant Surgeon to the Royal London Ophthalmic Hospital, Moorfields, and to the Middlesex Hospital; Late Assistant Surgeon, Rifle Brigade. With numerous illustrations, pp. 408. Philadelphia: Henry C. Lea.

In this work will be found the most important facts relating to injuries of the eye, orbit and eyelids. The author has made the most of his opportunities and has collected a number of cases of accident and injury to the eye, which he has observed at the Middlesex and Royal London

Ophthalmic Hospitals. These cases he gives in his work, as illustrating some particular class of injury. The work consists of eleven chapters, in which the following subjects are discussed. 1st. Superficial injuries of the eye. 2nd. Injuries to the eye from burns, scalds, and chemical agents. 3rd. Penetrating wounds of the eye, and other injuries of the Cornea and Iris. 4th. Traumatic cataract. 5th. Capsular opacities and dislocations of the lens. 6th. Foreign bodies within the eye. 7th. Traumatic intraocular homorrhage and rupture of the globe. 8th. Gunshot injuries of the eye. 9th. Sympathetic Ophthalmia. 10th. Injuries of the orbit. 11th. Injuries of the eyelids.

There is also an abstract of the Surgical Report of the Royal London Ophthalmic Hospital, Moorfields, for the year 1866. This latter gives the reader a fair chance of judging of the opportunities afforded the author, when he finds that of 851 patients admitted into the house 749 required operation, and also that the total attendance of out patients was 18,953 individuals during the year. There will be found added to the work specimens of test types corresponding to the "Schrift-scalen" of Edward Jaeger of Berlin. This is eminently a practical work and will repay careful perusal. It should be in the hands of every surgeon who desires to follow this branch of the healing art. The work is amply illustrated, many of the drawings are from Dalrymple's plates on the eye, but the majority are from cases which have come under the author's own observation. The work is issued in Mr. Henry C. Lea's best style, and can be procured of Dawson Brothers, Great St. James Street.

#### PERISCOPIC DEPARTMENT.

## Surgery.

REMARKS ON THE FOLLICULAR CHANCROID,

By F. N. Otis, M. D., Lecturer on Diseases of the Genito-Urinary Organs, at the College of Physicians and Surgeons, New York.

INOCULATION of the chancroidal virus, through sexual contact, occurs in three different ways. First, and most commonly, where the virus is applied to the surface of an excoriation or a fissure: here the ulcerative action commences at once, and the form of the chancroid corresponds to the shape of the excoriated or fissured surface. Second, in order of frequency, the virus may be absorbed (or forced by the intimacy of the sexual contact) into the mucous or sebacious follicles of the glans penis and the fossæ glandis. From the more generous distribution of such follicles in these

localties they are the most usual seat of such an accident. The irritative property of the virus, which is forced or absorbed a greater or less distance into the follicle, soon causes its mucous lining to swell and close the follicular orifice, thus imprisoning the virus within the follicle, and here it is retained until it works its way (as in such case it certainly will) to the surface, by the ulcerative process, when it presents as a minute pustule. As a rule, several follicles are inoculated at the same time. intimation of the occurrence of this mishap is revealed by an itching of the parts, which, when examined early, presents a variable number of small pustules, ranging in size from a pin's point to a grape-seed. Third, and least frequently, the chancroidal virus is deposited upon the sound integument or mucous surface of the penis, when it is erect, and by the subsequent natural wrinkling of the parts it is retained in moist and intimate contact with them until, by its peculiar caustic property, it effects an entrance through the protecting mucous or cutaneous surface. When this form of chancroid becomes established, its shape is usually circular, and corresponds with the surface to which the virus has been thus intimately applied. From the different conditions under which the chancroidal virus is inoculated during the sexual act, as above shown, it is readily understood that no definite date between the suspicious connection and the appearance of the chancroid can be fixed, but must necessarily vary in each individual The usual time, as cited by most authorities and based chiefly on the results of artificial inoculation, ranges between four and eight days. The follicular form of chancroid is described, and its advanced state illustrated very truthfully by Cullerier. Bumstead also mentions it. Acton, in the latest edition of his work "On the Urinary and Generative Organs." cites a case where he believes that the poison of the chancroid was absorbed into a hair follicle, but, as far as I am aware, no writer has vet described a case of follicular chancroid from its inception; where this form of disease has been treated of, the lesion presented has been the developed pustule. The follicular starting point of the disease assumed by Cullerier, Bumstead, and Acton, has been substantiated by a case which came recently under my observation. Mr. W---came to me complaining of having bruised his glans penis during a connection four days previous. On the morning following the indulgence the part felt very sore, and was swollen and inflamed. These conditions had been gradually increasing in intensity until he presented his case to me. found the inferior portions of the glans much tumefied from the meatus back to the fossæ glandis, and for half an inch on either side of the median line (the frenum had been smoothly carried away by a chancroid ulceration, for which I had treated him a year previous). The injured

part was swollen, and presented a smooth, shining surface of a deep red colour. By the most careful examination, with the aid of a magnifying glass, I could not discover any point of abrasion or solution of continuity whatever. I advised a simple water dressing, slinging up the penis, so that egorgement from the dependent position of the organ might be relieved, and as perfect rest as possible obtained. He called on the following day somewhat relieved, but in appearance the parts had not improved; the colour was even deeper than on previous examination. A wash of lead and opium was substituted for the water dressing, and the patient advised to keep the recumbent position. On the next day, the third from his first visit to me, and the seventh from the impure connection, he again presented himself. The tumefaction was much the same; the colour had deepened and was now of a violet tinge, and I discovered, as though under a glass, numerous whitish points varying in size from a pin's point to a pin's head, occupying a space a quarter of an inch broad, and one-third in length on either side of the median line on the inferior aspect of the glans. Previous treatment was continued, and I saw my patient daily for three days following, making in all ten days from the connection. On the morning of the tenth day I discovered some half a dozen whitish points just underneath the mucous membrane; these were then opened with a fine pointed bistoury, and discharged minute quantities of pus. Under the magnifying glass the little cavities, left after the discharge of the pus, were characteristic of chancroid ulceration. In brief, all the points, some twenty or thirty in number, finally worked their way to the surface, occupying some three days longer, and they soon coalesced from the extension of the ulcerative process, resulting in a true chancroid three-fourths of an inch in length by one-third of an inch in breath, occupying the site of the original white points. The first pustules were visible through the mucous membrane, but evidently deeper than its thickness, on the seventh day after the absorption. The first of these came to the surface on the tenth day, but it was not until the thirteenth that all had reached the mucous membrane on their outward march Applications of the strong nitric acid resulted in a complete recovery in a few days .- N. Y. Med. Gazette.

## Medicine.

ON THE TREATMENT OF THE ADVANCED STAGE OF CROUP.

By Dr. Eben, Watson, M. A., Surgeon to the Glasgow Royal Infirmary.

[The true indication is to relieve the spasm of the glottis or to reduce the odema of the mucous folds above it, without wounding the trachea, and then to use measures for the expulsion of the false membrane in due time through the natural openings.]

The topical application of solutions of the nitrate of silver of gradually increasing strength is a powerful reducer of the irritability of the glottis, but it requires far too much time for its action, even if it were otherwise suitable to cases of exudative inflammation, which I believe it is not. Emetics do certainly act on the glottis, and are such great helps in relaxing it that they can never be dispensed with, but their operation is only short-lived, and the patient would soon be exhausted by their very frequent employment. The inhalation of chloroform is perhaps the most speedy and powerful relaxer of the glottis at present known, and it may with caution be used in the cases to which I am now referring. It has this advantage, likewise, that its action may be maintained for a much longer time than that of those previously mentioned.

A few weeks ago a child of two years old was brought into one of my wards in the Infirmary, in the advanced stage of exudation croup. I thought he was suffering especially from spasm of the glottis, and had him put under the influence of chloroform, in which state his breathing became much fuller and more satisfactory, while both colour and heat greatly improved. But the mother, terrified at some mention that had been made of an operation, would not consent to his remaining in the house, and in spite of all our remonstrances, took the child home that same day, I suppose to die. Another good relaxer of the glottis is hot water, with which the vinum belladonnæ may, I think, be usefully mixed, and the best way for applying it is by Siegle's atomizer. In this way the patient is made to inhale the mixture as a spray, and even if he be an infant, the air in his neighbourhood may be so impregnated with the vapour that he cannot escape its action. I have seen much advantage from this appliance both in croup and in other laryngeal states allied to it.

These agents for relaxing the gottis have a double advantage; for they both gain time, which is so precious in these cases, and they may be alternated with other means, such as emetics, for the expulsion of the false membrane. They are the only relaxers of the glottis of which I can at present speak from experience; but do I not doubt that when attention is fairly drawn to the subject, other agents will be discovered still more appropriate to the fulfilment of this important end. At all events, that is the direction in which our endeavours ought to point, if we are ever to to be able to overcome this formidable feature of advanced croup.

In those cases of the disease in which suffocation becomes imminent from the supervention of œdema of the aryteno-epiglottidean folds, tracheotomy is often performed, and were it not for the unsound state of the trachea this would be a successful operation. Indeed, it will be found on a careful examination, that the most of those cases which are reported as successful performances of tracheotomy in croup are cases of ædema glottidis, often without a symptom of exudation at all, or in which the false membrane has been previously expelled, for ædema is apt to occur in the disease after the patient has struggled through its exudation stage. In such circumstances, the obstruction to respiration being at the glottis, tracheotomy relieves with certainty; but I repeat, that if the operation be performed during the exudative inflammation of the trachea, the natural and ordinary result is aggravation of the morbid action, too often to a fatal extent. I also assert, with some confidence, that, in the vast majority of cases, ædema glottidis may be reduced without tracheotomy by the timely employment of what I think more rational and certainly much safer measures.

Thus, for instance, I have in a good many cases of this kind successfully applied a strong solution of nitrate of silver to the edematous swellings by means of laryngeal sponge-probing, and, whenever this is rightly done, it will be found that there is an almost immediate transudation of serum from the tumor, whereby its bulk is diminished and the air permitted to pass more easily through the glottis.

If, however, the swelling does not yield to this application, or not with sufficient rapidity for the urgency of the case, there is another proceedure of more speedy efficacy which should then be practised. I refer to pricking or incising the edematous parts with the laryngeal lancet;—a measure which I can thoroughly recommend in suitable cases. In the performance of this little and almost bloodless operation the laryngoscope is not always available, either owing to the age or irritability of the patient; and, perhaps, in all cases, the best and safest way of performing it is to steady the tumor with the forefinger of the left hand, and then putting in the lancet, with its blade concealed till it touches the tip of the finger, to protrude the blade by means of the spring in the handle and so to prick or incise the part as desired. This is not a difficult operation, and I am certain from my experience of it, that it gives relief to the breathing, both speedily and effectually, without incurring any of the dangers of tracheotomy.

When this operation is required during the expeditive stage of crown I.

When this operation is required during the exudative stage of croup, I find it useful to follow it with an emetic, by which means all the loosened exudation is expelled and the full amount of benefit ensured. Much has been said and written of the advantages of particular emetic medicines in croup. But I suppose that the essential quality, desirable in such cases, is speedy action with as little as possible of depressing effect; and

this is abundantly fulfilled by a combination of ipecacuan powder with sulphate of zinc. In my practice I never prescribe the tartrate of antimony alone as a vomit, especially to a child, but I find that drug useful in cases of croup in almost every stage, when given in small doses, of the wine for instance: I think its effect when thus administered, is chiefly that of soothing and calling forth a natural moisture upon the lining of the wind-pipe. Since, moreover, the antimony is not used in these advanced cases for its depressing effect, it is not inconsistent to employ it as I have described, while at the same time it may be necessary to support the patient's strength with soups or even with wine. The inhalation of a spray of warm water from Siegle's atomizer is often of essential service after lancing the cedematous aryteno-epiglottidean folds. The vapour just acts as a fomentation does to external parts, by soothing its irritability and reducing congestion.

In conclusion, I think I may re-state in brief terms the practical results which, in my opinion, flow from the preceding consideration of this subject.

- 1. Tracheotomy should on no account be performed during the exudative stage of croup; for it is either useless in the worst cases or positively hurtful in those where there is any hope of recovery.
- 2. In those cases of advanced croup in which the spasmodically constricted glottis is the cause of immediate danger, our efforts should be directed towards its relaxation, for which purpose no very satisfactory means are as yet known to us, but perhaps the best are the inhalation of chloroform and the use of Siegle's atomizer, interrupted occasionally by the employment of an emetic.
- 3. In those eases in which edema of the aryteno-epiglottidean folds is the proximate cause of impending apnœa, the swellings should be reduced by the topical application of strong solutions of nitrate of silver, or by the laryngeal lancet.
- 4. And lastly, the expulsion of the false membrane from the wind-pipe, the performance of tracheotomy will very seldom be necessary; but if it is required from obstinate disease of the larynx, it will generally prove successful, in striking contrast to the sad results of the operation when performed while the trachea is lined with exudation.—Glasgow Medical Journal, Feb., 1867. p. 374.

#### THE INOCULATION OF TUBERCLE.

The London Lancet gives the following summary of the important labours of the Commission appointed by the Academy of Medicine to investigate the alleged discoveries of Villemin in this sphere:

This Commission was composed of M M. Louis, Grisolle, Bouley, and Colin. M. Colin read the Report in the same of the Commission and included in it an account of several experiments by the Commission, which yielded results essentially similar to those obtained by M. Villemin. At the very outset of the Report there occur words which indicate the opinion of the members of this Commission on the main conclusions of M. Villemin. They give him credit for throwing light by physiological experiment on medicine, and say that the two memoirs presented by him to the Academy, on the 5th of December, 1865, and on the 30th of November last, reveal to us a fact of the highest interest-the transmission of phthisis by the inoculation of tuberculous matter. Their endorsement of M. Villemin's main conclusions is all the more effective from the fact that they do not hesitate to say that in one or two minor points he has come to hasty or incorrect conclusions. Two of these are in particular pointed out. First, they aver that M. Villemin was inexact in believing that sheep were insusceptible of tuberculosis, and that he too quickly concluded that the tubercles in the cow and those in man were of the same nature. M. Colin, as we have said, gives in the Report an account of the various experiments with the inoculation of tubercle by the Commission. Some of these failed; but the most of them succeeded perfectly. The failures were suggestive to M. Colin. He procured from M. Villemin a specimen of the tuberculous matter used by him. This included fragments of various kinds of tuberculous matter, old and recent, transparent and grey, firm and softened. He reduced all into a homogeneous pulp, and inserted portions of this into four rabbits at the base of the ear. Only one of these animals became affected with tuberculosis. M. Colin accounts for the failures principally by the fact that in examining two of the animals he found that the tuberculous matter inserted had become encysted at the seat of the wound, and so had become protected from absorption. In his subsequent experiments he was careful to go deeper and to spread the matter over a larger surface, and so he obtained success. These later experiments are valuable, not only as additional to M. Villemin's, but as made with every distinct form of tubercle used separately. Fine miliary tubercle, softened caseous matter, hard tubercle taken from an ox affected with the calcareous form of phthisis, yellowish tubercle in course of the so called regressive metamorphosis; and lastly, slices of a tumor full of strongles taken from a sheep affected with verminous phthisis, were all used, and all with similar results. We shall give as a specimen M. Colin's account of his first experiment. It illustrates not only the phthisical result obtained, but the effects produced in nearly all M. Colin's experiments on the lymphatic vessels and glands, and upon which he founds important conclusions:

"A rabbit was inoculated with fine miliary granulations taken from a cow. He died, with all the appearance of phthisis, after two months and some days. The lungs were strewed with tubercles; the liver, the spleen and one of the kidneys presented tubercles; the glands of the neck and of the ear were swollen. Finally, from the point where inoculation had been effected, there proceeded white tracks, like farcinous cords [des trainnes blanches, semblable et des cordes farcineuses]."

The glandular results are thus described in the second experiment. The rabbit had become tuberculised after the inoculation with softened caseous tubercular matter:

"The inguinal glands, the axillary, the prepectoral on the side of inoculation, were hypertrophied and penetrated with matter of caseous aspect."

The principal conclusion to which the various experiments led, is thus stated in the report: "Thus, in all the degrees of its evolution, and in all its forms, tubercle comports itself in an identical manner."

An interesting question is, the extent to which the contagious or inoculable character of tubercle is possessed by it exclusively. The experiments of the Commission show that a great variety of substances, under the generic name of "tubercle," have the quality of reproducing themselves in the central organs; and they go to show that all inflammatory products have a similar tendency, including pus. The exact relation of tubercle to inflammatory deposits is yet a moot point amongst pathologists. All that can be said here is, that experiment shows that there is a considerable similarity between the deportment of tubercle and other inflammatory products when inoculated. According to M. Colin, the other inflammatory products act in the same direction, but not to the same extent, as the grey granulation. "Les produits morbides presentes comme des resultats d'inflummation ou de regression n'agissent pourtant pas au tant que la granulation grise."—Med. & Surg. Reporter, Philada.

#### PERMANGANATE OF POTASH IN ACUTE RHEUMATISM.

By C. M. FENN, M. D., of San Francisco.

An extract from a clinical lecture delivered by Dr. James F Duncan at the Adelaide Hospital, some time since directed my attention to the use, among other remedies, of permanganate of potash in the treatment of rheumatism. I promised myself to make trial of the remedy at the first opportunity. Regarding the so-called chemical theory of the

etiology and pathology of rheumatism as, at least, the most pausible; and believing the efficacy of the other salts of potash in that disease to be largely due to the measure of oxygen which they contain, it seemed to me that in this salt we possessed a remedy admirably adapted to meet all the indications; and that from the fact of its containing so large a proportion of oxygen (KO, Mn<sub>2</sub> O<sub>7</sub>), and holding the same in such loose affinity, we should be enabled most speedily to promote the transformation of lactic into carbonic acid. In apparent corroboration of this view, I append the record of three cases.

Cise 1. Mr. S-, salesman, æt. 30, after some unusual exposure, was prostrated by a severe attack of rheumatism. Upon an examination of his case the new remedy recurred to my mind. But the urgency of his symptoms was such, that it seemed preferable to make use of the medicines we had some confidence in, rather than to fly to others we knew not of. He was, therefore, ordered a preparation of potass, iodid; vin. colch. sem., etc., and submitted to a hypodermic injection of morph. acetas. one-fourth of a grain. To modify the exhausting and trouble some perspiration, he used on the third day, a vinegar vapour bath, with no appreciable relief. On the fourth day, discovering no change in his condition, other than might be ascribed to the daily hypodermic injections, I requested him to suspend the mixture and gave half a grain of the permanganate, three times a day. At my next visit on the following evening, I was suprised at the marked abatement of all the symptoms. The tongue was quite clean, the perspiration no longer excessive or disagreeable, and the pains were so far relieved as almost to preclude the continuanc eof an anodyne. His convalescence was now constant and rapid, and on the tenth day from the commencement of the attack he was again at his post.

Case 2. Mrs. G.—,æt. 35, of full habit and previously healthy, was attacked during the passage from New York. There had been a considerable amelioration of the more violent symptoms at time of her arrival here; but some of the larger joints were still tumid and painful. The permanganate of potash was resorted to, and in a few days she was able to attend to her household duties.

The third case I regard as, in some sense, a crucial test of the remedy. The patient, a man in middle life, had long been a victim to chronic rheumatism: some of the joints had become permanently distorted with tophaceous deposits, and the malady was so far incurable. This was varied, however, at intervals of two or three months, with acute attacks which apparently resisted all the usual remedies, and expended their force in from two to three weeks. I had previously attended him in several of

these attacks, and found the common remedies, colchium, acetate of potash in large doses, etc., of but little avail. I now put him on the permanganate, and had the pleasure of seeing him on the street in seven days.

I find the raspberry syrup to be the best menstruum, as it disguises the somewhat nauseous taste of the medicine completely.—Pacific Medical and Surgical Journal.

# TWO CASES OF CHOREA TREATED EFFICIENTLY WITH SULPHATE OF MANGANESE.

By WILLIAM A. HAMMOND, M. D., Professor of Diseases of the Mind and Nervous System, in the Bellevue Hospital Medical College, &c.

Having previously used the preparations of Manganese in the treatment of chlorosis, and latterly the compounds of this subtance and iron, recommended by MM. Petrequin and Buisson, and imported by E. Fougera, in the same affection with most excellent results, I was induced to try the manganese in two cases of chorea which have recently been under my charge.

J. F., a young girl, et. 14, was brought to me July 6, from Illinois, suffering under a very aggravated form of chorea. So violent and extensive were the convulsions that the child was unable to walk, the legs being thrown about in the most disorderly manner, or to do the most simple act with her hands. The muscles of the head, neck, and face were likewise in tumultuous action, and occasionally words were ejaculated against her will. The appetite was good.

The disease had ensued after a severe attack of acute rheumatism, and had lasted over four months, when the case came under my care. Menstruation had begun at  $13\frac{1}{2}$  years, and was regular, although the general condition of the child was somewhat chlorotic.

In the treatment iron had been first employed, but had induced headache and gastric disturbance; arsenic and strychnia and galvanism had also been used without any successful effect upon the disease.

I prescribed the following mixture: Manganesii sulphatis, 2 drachms, aquæ syrupus zingiberis, of each  $1\frac{1}{2}$  ozs. M. Dose, a teaspoonful three times a day. Five grains of the sulphate of manganese were thus taken at each dose.

Under its use the child rapidly improved, and on the 22d ceased taking the medicine, being entirely well. The complexion had lost its paleness and all convulsive movements had ceased.

August 2. F. C. S., a boy, æt. 15, from the interior of Pennsylvania, was brought to me by his mother to be treated for chorea. In this case

the convulsions were limited to the right side of the body, and consisted in certain regular movements of the arms and legs, which came on every two or three minutes, and lasted half a minute or more. There were no convulsive actions of the muscles of the head, neck, or face. The arms were thrown out violently from the side, and as violently brought back; at the same time the thigh and leg were alternately flexed and extended rapidly.

Upon careful examination I ascertained that there was considerable loss of power and sensibility on the affected side.

The boy's general health was bad. He was anemic, indisposed to either mental or physical exertion, and had a rapid and feeble pulse.

The affection had ensued from fright caused by his seeing a schoolmate fall from a height and injure himself severely.

All the ordinary remedies for chorea had been used without material benefit, and when the case came under my observation the disease had lasted somewhat over a year. I directed the use of the mixture previously mentioned, and likewise Fougera's iodinised cod-liver oil. No other medicines were employed under this treatment, the boy began at once to improve, his face became ruddy, his appetite greatly improved, and his pulse rose in force whilst it declined in frequency. The convulsive movements ceased in his leg at the end of a month, at the same time greatly diminishing in the arm. On the 15th of October the power of the will was entirely restored over all the previously convulsed muscles, the strength was regained on that side, and the general health was as good as could be desired. The administration of the medicines was now stopped and the boy returned home.

I have now a case of chorea in an adult under treatment, in which I am using the carbonate of iron and manganese pills of M. Burin de Buisson, with excellent prospect of effecting a complete cure, although the affection has lasted for many years.

[From the investigations of M. E. Millon, quoted by M. Robin, in his recent work Sur les Humeurs, it appears that the average quantity of manganese existing in the blood of an adult amounts to about 10.5 grains, the quantity of iron to about 16 grains. From this the inference will be at once drawn that manganese has the same therapeutical rates as iron.

The association of chorea and rheumatism, noticed in the first of the above, is discussed in Trousseau's Clinical Medicine. Dr. Bazin gives the credit of its first observation to Dr. Richard Bright.] New York Medical Gazette.

ON THE DIAGNOSIS OF OBSTRUCTIVE MITRAL BY A PRESYS-TOLIC BRUIT.

By Dr. PEACOCK.

[The following is an extract of a paper read by Dr. Peacock before the Hunterian Society.]

Dr. Peacock stated his former disbelief in the existence of any such murmur, except, it might be, in rare cases, but subsequent inquiry had led him to modify his views to a considerable extent. He narrated a case in which he had been able to make out a distinct presystolic bruit during life, and on examination after death he found well-marked mitral constriction, together with vegetations on the auricular surface of the In the lungs a number of apoplectic kernels of various ages were discovered. Dr. Peacock had found these bruits to exist either with or without systolic murmur, but, in some cases, and especially when associated with the last, their detection was very difficult, and the diagnosis of mitral obstruction by physical signs alone uncertain. It might, however, be made out by the fact that the burden of the work was thrown upon the right side of the heart, which beat louder than usual, by the tremor which sometimes accompanied the contact of the apex of the heart, with the side, and by the pulse, which, as the left ventricle was unaffected but the supply of blood limited, was small and quick, but regular. The condition of the lungs is also different; the onset of the disease being more gradual than in regurgitation, the pulmonary capillaries have time to distend; hence the dyspnœa is less. There is less general venous engorgement, so that there is less dropsy, and that mostly in the lower extremities; the face is also usually paler. The prognosis is better than in mitral regurgitation, although in neither did he consider it so bad as was sometimes stated, and in both it was better than in aortic regurgitation. The treatment of the two mitral affections was rather different. In the case of obstruction, the patient was usually anæmic, and the circulation was with difficulty maintained; therefore tonics, especially chalybeates, were specially indicated. In regurgitation, again, the symptoms were generally more urgent, and the accumulated fluid had to be removed by diuretics or cathartics. Some patients lived a very long time with contracted mitral, especially young people who might have been born so, or acquired the condition soon after birth. As for himself, he was inclined to believe that rheumatism as a cause of heart complaint had been over-estimated. - Medical Times and Gazette, Feb. 3., 1867, p. 131.

# Canada Medical Journal.

MONTREAL, JANUARY, 1868.

We have more than once in the columns of the Canada Medical Journal, complained of the almost utter uselessness of the mortuary statistics of the city of Montreal, and called upon the city authorities to enforce section 4 of the By-Law concerning Burials. This section provides that no keeper of a cemetery shall permit any interment to take place without previously receiving a certificate signed by the attending physician, stating the name, apparent age, birth place, date and place of death, and the disease of which he or she may have died. The medical gentlemen who hold the office of Public Vaccinators, for three consecutive years, in their annual report, called the attention of the Council to the existence of this By-Law, and urged its enforcement, as a means of giving increased value to the mortality statistics of the city. Their appeals and our remarks seemed, so far as we could judge, to be useless-for no action was taken in the matter. It was, therefore, with something like astonishment that in the Montreal Gazette of the 11th of December last, we read an advertisement dated at the City Hall the previous day, and signed by the City Clerk, giving public notice that on and after the 1st of January, 1868, Section 4 of the By-Law concerning burials would be rigidly enforced. We know not to whom we are indebted for the sudden awaking which has caused the enforcement of this By-Law, but most assuredly he deserves the thanks of the entire community. If the By-Law be rigidly enforced, as we sincerely trust it will, a value will in a very short time attach to our mortality returns, which they have not previously possessed. to enable us to reap all the benefits which we can, from this By-Law, we think the Council should take one other step. The closing paragraph of the By-Law states " that the certificate may be in the form specified in the said By-Law." We fear that the word may will defeat, in a great measure, the proper working of the Law. Unless the City Council has

the form B. printed, and keep the profession supplied therewith, we are convinced that certificates will be handed in and accepted by the keepers of cemeteries, which are deficient in more than one particular. If this should occur, it will be seen at once that so far as giving reliable information, we would be little better off than before the enforcement of the By-Law. It may be argued that the profession will soon get used to writing out the certificates; such may be the case in some instances—but we feel convinced that printed blanks (which the corporation are bound to supply to every physician,) should be the only form of certificate which ought to be received and accepted. We earnestly hope that the active member to whom we owe the enforcement of this By-Law, will see the force of our remarks, and at once have the matter attended to.

#### GYMNASTIC AND ELOCUTIONARY EXERCISES.

We have recently witnessed the exercises of the boys of our High School at a public exhibition, given by our young friends with the worthy object of contributing to the funds of the House of Refuge; and we were impressed with the health bestowing exercises of the gymnastic portion of the entertainment. Subsequently, Mr. Barnjum, the manager, gave a select exhibition of a young ladies' class, at which we were present. The movements were graceful and health invigorating, each muscle of the body was brought into play, and duly exercised. The class was composed of little girls ranging from 7 or 8 to 15 years of age. The various exercises consisted of walking, running, dancing, the dumbbell exercise and the exercise of the rings, all being accompanied by appropriate music. These various exercises are based on those first introduced by Ling of Stockholm, and are calculated to be of the greatest benefit to muscular development. It is a fact worthy of note that many of the ailments of the body proceed from a system of mental cramming of the young at the expense of muscular energy. Youth is the season of growth both of body and mind, and so sure as mental training is forced, and bodily exercise neglected, there will result disease of the neglected body in some form. In the education of youth it is desirable that harmony should be consulted, by this we mean that harmonious development of the body with the intellectual faculties, each depending on one another, and each equally essential to perfect and uninterrupted health. Many of the ailments of the young, especially spinal curvatures, are due to a want of tonicity in those muscles which are intended to support the weight of the head and upper extremities. If these muscles are neglected as they too often are, by permitting young children and more

especially young girls to be content with the amount of exercise they receive by a walk or drive to and from their school, it is almost certain to result in disaster, or at best, in feeble development which may and often does end in serious and permanent injury. What would be thought of the stock breeder who fearful of his young animals breaking their legs or getting into some mischief in the field, was content in driving them to water and back again to be shut up in a close stall for the rest of the day? Man is after all, but an animal, subject to the same laws and having the same beneficent hand to guide him, and it is absurd for him to carve out a way of his own, as regards the nurture of his offspring, at once in direct violation of the most apparent truths. We regard exercises similar to those which we witnessed the other evening, of greater importance in a moral sense, as it will be found that those who freely indulge in athletic sports, are less liable to give way to temptation and seek amusement in the various debasing passions of which man became heir at the fall. It is aptly said by Rousseau that "the weaker the body the more it encumbers and weakens the soul." Gymnastic exercises ought to be an essential and indispensable part of education for both sexes; in speaking of gymnastics it is not to be understood we refer to the converting oneself into a whirligig or catherine-wheel, these are feats which answer for the sterner sex, but free and beneficial exercises can be indulged in without any apparatus whatever.

The benefits to be derived by a steady course of exercise are incalculable, but to be indulged in at all it is necessary that a competent instructor should be in attendance.

These benefits may be thus hastily summed up.

Frequent exercises render the muscles firm and increase their developments; they render more active the general circulation, so that each portion of the body receives its due amount of nourishment.

They render the muscles more subservient to the will, so that the movements of the body are more graceful, the various extremities acquiring a pleasing firmness, steadiness and dexterity in motion.

Gymnastic exercises develop the capacity of the chest, giving increased capacity for the free play of the lungs, they tend to the symmetric development of the body as a whole, so that no one portion increases in size at the expense of other parts.

They prevent occurrence of obesity, which is an evidence of a feeble state of repair of certain portions, most frequently the result of excesses in alimentation.

The healthful tone of the skin is promoted by free gymnastics, thus rendering it less liable to the injurious influences and alternations in temperature—a common source of ill health.

And above all they give to the individual that self reliance which should be possessed by each one, so that under trying circumstances, or in the hour of danger, resources are at hand by the exercise of which life or limb have been frequently saved. These, then, are a few of the benefits to be derived by a steady perseverance in muscular exercises, and we can heartily recommend to the heads of families the advisability of permitting their children of both sexes to seek the health invigorating exercises which are to be derived by attendance at the gymnastic institute of Mr. Barnjum.

#### THE TORONTO HOSPITAL.

We regret exceedingly to notice the closing of the above valuable institution, which for some time has been struggling hard to keep its doors open. We are not thoroughly acquainted with the various causes which have led to this event, but we must say, we have been struck with the somewhat large amount which it seems to cost to maintain each patient. Toronto cannot afford to be long destitute of an Hospital, and when its doors are again re-opened, we trust it will be under auspices which will ensure its successful conduction.

#### TO OUR SUBSCRIBERS.

It is the intention of the Publishers to send in this number of the Journal, accounts to all of our subscribers who are in arrears for their subscriptions, and we earnestly hope that there will be a very generous response. There is a very considerable amount owing, and its payment would enable us to at once liquidate all claims against us. This is the season of festivity, when the heart is said to open more readily than at any other time, and we trust all who owe us will remember that we have to pay the printer.

#### MONTREAL DISPENSARY.

Dr. Boyer and Dr. G. E. Fenwick have been elected consulting physicians to the above Institutions. Dr. Angus McDonnell and Dr. Sewell have been elected by the Corporation of the Montreal Dispensary, members of the attending Medical Staff.

#### TO CONTRIBUTORS.

We are desirous in future to bring out the Canada Medical Journal on the first of the month. Contributors are requested to send contributions intended for the ensuing number not later than the 15th day of the month.

### CANADA

# MEDICAL JOURNAL

#### ORIGINAL COMMUNICATIONS.

The present problems in Abdominal Section; illustrated by a successful case of Double Ovariotomy. By Prof. Horatio R. Storer, M.D., of Boston, Vice President of the American Medical Association, etc., etc.

It has become unnecessary to discuss the question of whether abdominal section, waiving temporarily its performance for other purposes, is, or is not, a justifiable operation in the case of diseased ovaries; the very large percentage of recoveries now obtained by Spencer Wells, Clay, Keith Koeberlé, and others of lesser note, having decided this point authoritatively. It is therefore useless further to collect statistics, save as they may bear upon other and more special problems that are as yet undecided.

We may safely assume that cystic disease of the ovary cannot be cured by medication, and that its alleged relief by chlorate of potash, &c., &c., has been in cases of spurious pregnancy or other error of diagnosis; that tapping, while temporarily relieving, only serves to render the patients' real condition more hazardous, cases to the contrary being exceptional; that ovariotomy is the measure which as the rule ought to be resorted to, oftener in fact than some of its advocates have dared to do, and that the results already thus attained are equal to those of some of the most common operations of surgery. The point that remains to be solved is this; how can the comparatively small mortality now attending this operation be still farther reduced?

As bearing upon some special points involved in the solution of this question, the details of one of my late cases may prove interesting, the more so perhaps to the profession in Canada, from the fact that the patient was sent to me from one of the provinces.

Inasmuch as some of the cases of ovariotomy that are attended by the most fearful complications, recover, "irrespective or in spite of the treatment pursued," many have been inclined to underestimate the question of the relative value of incidental points, and to consider them all of trifling importance. So far from this being the case, I believe that in many of these remarkable instances of recovery, it is just the greater skill of the operator called out by the emergency, and his increased attention to the after treatment, that produce, against probability, as it were, the favourable result. On the other hand, a certain proportion of cases still die; many of them in skillful hands and without complication. This untoward event ought not to be considered, as it too frequently is, the effect of chance or the visitation of Providence, but rather as owing to definite causes, capable of being known, and as capable of being avoided.

Mrs. Dunham, aged 43, was sent to me for operation during the month of Oct. 1867, by my friend Dr. John Berryman of St. John, N. B., by whom she had been tapped some two months previously. She is the mother of six children. About two years ago she first noticed a small tumour in the right iliac region, which had steadily increased in size till the paracentesis already referred to. Patient now very much exhausted from effects of extreme sea-sickness upon the voyage. Upon examination the abdomen was found moderately distended by an obscurely defined mass, filling its central and lower portions and over-lapping each side, from which the abdominal wall could not be distinctly separated by lifting its folds. Throughout the tumour there were indistinct and purely localized centres of fluctuation, giving the idea of a multilocular cyst containing many pockets of dense and tenacious fluid. By digital examination of the vagina, it was found that there were present both cystocele and a protrusion downward of the posterior portion of the upper vagina, bounding Doug las' fossa; the recto-vaginal septum being unaffected. Through this region there was more distinct fluctuation, giving the impression that there existed an inferior cyst which was very much larger and filled with a more serous fluid than those above it; an unusual occurrence for a polycystic ovary. The menses which were now due not having appeared, it was thought best to defer the operation for a while, and thus to allow, in addition, the restoration of the patient to her usual state of health and an opportunity for special preparatory treatment. Ox gall was therefore ordered, as recommended by Mr. Clay of Manchester, to regulate the bowels, and the mur. tr. of iron, that favourite prescription of Sir James Y. Simpson, as a renal depurant. There had moreover been present an inclination to irritability of the bowels, for which, preliminarily to the ox gall, she was put upon a simple diet and gentle correctives.

Under the above treatment, the patient steadily improved in health; the menses however, did not reappear. It was thought best to wait a while in view of the chance of pregnancy; several instances having now been put upon record where the case has been gravely and even fatally complicated by the unsuspected existence of this condition at an early period before its presence could be determined by the ordinary methods of examination. Upon the other hand, it was possible that the catamenia had been suppressed, as so often occurs, by the sea voyage, or by the sudden and unexpected occurrence of the climacteric, to nearly the ordinary age for which the patient had arrived.

As weeks passed, however, more urgent symptoms began to show themselves. The upper portion of the abdomen rapidly filled, dyspnœa and other signs of pressure became marked, and it was evident that operative measures must at once be resorted to, to save the patient's life. Accordingly, at ten o'clock on the morning of November 20, anæsthesia was induced by sulph. ether conc., there being present Drs. Graves, Lynam, and Hooper, of the United States Marine Hospital,—Wheeler, of Chelsea,—Stone, of Boston,—and Mr. F. G. Jordan, of St. John, a student of Dr. Berryman. The details of the case I take from the notes of my assistant Dr. Stone, and Dr. Wheeler; the latter gentleman, as in my last case of ovariotomy, had charge of the after treatment, and it is but justice to state that the success in both these cases was owing, in a great measure, to his judicious and untiring care.

"Precaution having been taken to keep up the circulation by the application of hot bottles to the feet, an exploratory incision was first made about half an inch below the umbilicus, and the same distance to the right of the median line. Upon dividing the integument, fat and superficial fascia, a pocket was opened from which was discharged a small quantity of laudable pus. By careful continuation of the dissection upon a director, the peritoneum was divided. Instead, however, of a free cavity being exposed, it was found that another small pocket had been opened, bounded by walls of adhesion, which entirely surrounded it, save at one point towards the left. Through this a small stream of quite limpid fluid began to empty itself. It was at first feared that the cyst wall might have been pricked, but upon careful examination it was found that the fluid was ascitic, and by enlarging its outlet an amount of some two and a half gallons was drawn off. Exploration now showed that the most extensive adhesions existed throughout the greater portion of the abdomen, in consequence of the subacute peritonitic inflammation occasioned by the tapping at St. John. These adhesions were broken down with extreme difficulty, particularly in the umbilical and

epigastric regions. Attempts were now made to lessen the size of the tumour by puncturing it by a trocar with tubing attachment. It was found, however, that the contents of the cyst were viscid, albuminous, and semi-gelatinous, so tenacious, indeed, as not readily to escape through the canula. It is probable, moreover, from the evidence furnished by Mr. Jordan, who had been present at the tapping, and who had particularly noted the character of the fluid then drawn off, that a major portion of this had been ascitic, and though a cyst or cysts had been punctured. that but a small portion of their contents had been evacuated; enough, however, had exuded into the cavity of the abdomen to have decided the occurrence of the peritonitic attack. The incision was now extended both upwards and downwards, and the tumour lifted out by Prof. Storer and Mr. Jordan, as little traction as possible being exerted, the pedicle of the mass being very broad and short. Dr. Storer's clamp shield was, however, applied without difficulty, and sufficient compression of the pedicle having been made, it was divided with the seissors. Attention was now directed to the general condition of the patient, who had rapidly passed into a state of collapse. The pulse could not be discovered, and the respiration had sunk to about sixteen in a minute. The abdominal flaps were immediately laid together, the clamp shield still remaining in situ, a piece of flannel was placed between the intestines and peritoneal surface, not so much to keep up the heat of the former as to exert pressure upon the bleeding points of the latter, and the attention of all present was turned to efforts at resuscitation. Mustard and hot water, even to the extent of blistering, were applied to the breast, neck, and limbs, and ammonia to the nostrils; the feet and hands were smartly bastinadoed, and at the suggestion of Dr Lynam, an enema of brandy was administered. These measures were persevered in for an hour and ten minutes before reaction was established. At two o'clock, p.m., the patient being apparently comfortable, the abdominal walls were reopened, the condition of their contents found as they had been left, and that all hæmorrhage had been prevented by the clamp shield and peritoneal compress, although no ligatures had as yet been applied. All present being semewhat exhausted by the exertions they had thus far been compelled to make, opportunity was taken to enjoy a hearty dinner.

"At 2.45, Prof. Storer removed the flannel with which he had enveloped the intestines, and re-examined the pedicle. It was found that though the patient was of a hæmorrhagic diathesis, as shown by an unusual oozing of blood from the abdominal wall during and after its dissection, requiring in several places the application of

perchloride of iron, and though the hypertrophied uterus was much congested, as was also the broad ovarian stump, yet the clamp shield had prevented even a drop of blood from escaping. The pedicle was sutured rather than ligatured, the stitches, ten in number, being passed from side to side, and so closely as to act both as sutures and ligatures, by a modification of Dr. Storer's method of "capping" the pedicle; sufficient space being left between each of the stitches to allow free capillary circulation, and thus to prevent mortification of the extremity. Upon proceeding to examine the condition of the other ovary, it was found that this also was diseased, and occupied the entire cavity of the pelvis, having displaced the uterus upwards, and that its size was that of a child's head at full term. So firmly wedged was it within the pelvis, and so great was the resistance of the promontory of the sacrum from above, that the united strength of Drs. Storer and Hooper was required to dislodge the tumour. The clamp shield being again applied, division was effected as before, and eleven metallic sutures inserted in the T shaped pedicle close to the uterus. This smaller tumour (the left ovary) weighed two and a half pounds; the two, with their contents, weighing thirty-six pounds. abdominal wound was now closed by thirty double sutures of annealed iron wire, electroplated with silver, introduced by Simpson's hollow needle, and the patient left in Dr. Wheeler's care." (Dr. Stone).

The wood-cut here appended shows the size of the tumours relatively to



each other, and to the normal female pelvis; the "dummy" uterus also exhibited, prepared by Mr. Jordan, serves to represent the hypertrophied condition of the organ and its displacement upwards by the pelvic tumour.

"Thursday morning, 21st Nov.—During the evening and night the patient gradually came up from the shock of the operation, feeling much exhausted in strength. Has slept somewhat during the night at short

intervals; complains of little or no pain in the abdomen. Pulse about 120, and soft. Stomach somewhat irritable; to quiet it she takes small pieces of ice, as well as to relieve the dryness of the throat, though the tongue is moist; catheter used every four hours to empty the bladder. Some distension of the upper abdomen, but not much tenderness. The wound remains dry and looks well.

"Friday 22nd, and Saturday 23rd.—Has remained comfortable in every way and slept sufficiently. Thirst continues, and vomits less. The skin at a good temperature and at times a little flushed with heat. Takes a little brandy; also some gruel made of flour with milk. Some more distension of the abdomen. Pulse less than 100. Is having a dark sero-sanguineous discharge from the vagina with the usual symptoms in the back and limbs of her menstrual periods. Takes once in four hours a suppository of  $\frac{1}{3}$  gr. of sulph. of morphia. Alternates, by mouth, the mur. tr. of iron, 15 drops, with the same quantity of the oil of turpentine, so as to get their combined influence upon the kidneys. The mind cheerful and hopeful as to the result.

"Sunday 24th, Monday 25th, Tuesday 26th.—General appearance continues to improve. The stomach behaves better and retains nourishment. The abdomen continues swollen; slight tenderness on pressure. The wound looks well. Have applied two or three times the saturated tr. of iodine over the whole surface of the abdomen. The urine quite free in quantity. Bowels have moved by the use of soap and water injection.

"Wednesday 27th, Thursday 28th, and Friday 29th.—Continues quite comfortable, sleeps well; takes beef tea in addition to her other diet, with wine and brandy. Pulse only 90. The night previous (Tuesday) she had a slight chill followed by some reaction; the pulse came up to 120, but subsided again. Connected with this last symptom a little abscess or pocket of pus developed near the line of incision, which was liberated by untwisting a few wires. This was the first appearance of any discharge from the wound, nearly two thirds of the upper part having already united by first intention.

"Saturday 30th, Sunday Dec. 1st, Monday 2nd.—The patient continues to improve; the abdomen more flat; quite a free but entirely superficial discharge from the wound. Has had some pain in the bowels, with several dejections of a dark, bilious character. Has required injections of starch with the tr. opii, and port wine in the place of brandy. To-day, (Dec. 2nd), took out all the wire sutures from the wound, save seven at its lower extremity.

"Saturday, Dec. 7th .- For the last week the patient has been grad-

ually gaining in strength. Appetite good, and sleeps well at night. The bowels have been rather troublesome; the discharges being too frequent, dark and liquid, with some pain. Have discontinued the mur. tr. of iron, and continue old port wine in the place of brandy, and a gr. of quinine three times a day. The wound continues to contract and discharge less, there being little or no irritation from the presence of the few remaining wires, which seem to act as a support to the lips of the wound.

"Saturday, Dec. 14th.—The patient steadily gaining; complains less of the bowels. The discharges less frequent, so as to require no opiates. She is able to sit up on a lounge and get into a chair for a short time each day. To-day, have removed the last sutures in the wound, which has now healed, except at one or two points, and have touched these with nitrate of silver.

"Monday, Dec. 30th.—Patient is able to sit up most of the day, and has on her usual dress; walks about the room, and is free from pain. Wound entirely healed, save at a single point, and this is only superficially united. To-day leaves for St. John, and her home; just five weeks and three days from the time of the operation; the husband and wife being a very happy couple." (Dr. Wheeler.)

Jan. 16th, 1868.—Learned by letter that the patient arrived safely at St. Johns, in good condition, and that her health is rapidly improving.

In the case just related, there were several unpleasant complications:

I. Both ovaries were involved.

II. The patient had been tapped, and in consequence, subacute peritonitis had occurred, attended by the formation of very extensive and firm adhesions.

III. Ascites was largely present,

IV. The left ovary was so firmly packed beneath the brim of the pelvis that it was extricated with great difficulty, and indeed required much taxis to start it from its socket.

V. The tumours were practically non-pediculated.

VI. Very severe collapse occurred during the operation.

V1I. The woman was possibly pregnant, and yet to reward us for taking the responsibility of operating, and of completing the operation when begun, in the face of every apparent probability, the woman made a magnificent convalescence.

A word as to these several points.

I. We find that the implication of both ovaries is no bar to the operation. This has been the experience of other operators. In another case of double ovariotomy that I have had, complicated with a very large

Wolffian cyst that was also removed, recovery was rapid and complete. Only two years since, Scanzoni remarked that he had been able to find but twenty-five cases of double ovariotomy reported.\* In Mr. Spencer Wells' first 150 cases, the double operation was required only seven times, and of these patients four recovered. Mr. Wells has shown that the greater frequency of finding both ovaries diseased at autopsies than at vivisections, is owing to the fact that the latter examination is made at a much earlier period; the allowing the disease to persist in one ovary seeming to render its occurrence in the other more probable.†

II. Tapping prior to the operation for removal proves one of the greatest sources of danger; the resulting adhesions increasing the risk of hæmorrhage, of shock and of renewed peritonitis.

III. Ascites is feared by many and by some is considered symptomatic of the disease being malignant. I consider that in itself the serous collection is of little importance, save as tending to obscure the diagnosis, or as depending upon cardiac, renal, or hepatic disease, points usually easily enough made out. If either of the diseases here referred to is present, it is yet not necessarily a bar, since it may be itself merely the result of the pressure of the cyst. I go further than this and will say, contrary to the opinions of most authorities, that cancer of the ovary is also no bar. It is very rare, scores of the cases reported as such from autopsies, being merely aberrant varieties of ordinary cystic disease. Where it is present, the case is amenable to precisely the same rule as governs excision of the carcinomatous mamma, testicle, cervix-uteri, or even the fundus of that organ when the cervix and lower third are unaffected; the ovarian and fundal cases being only somewhat worse than the others. Where without an operation the patient must surely die, and that soon, the chances all being against her, and where, with the operation, she may live, she should have, if she desire it, the ghost of a chance, certainly its solid substance, and he is a coward who fails to afford it to her, and seemingly cruel or wickedly jealous if he deny this right or the opportunity to afford it, to others.

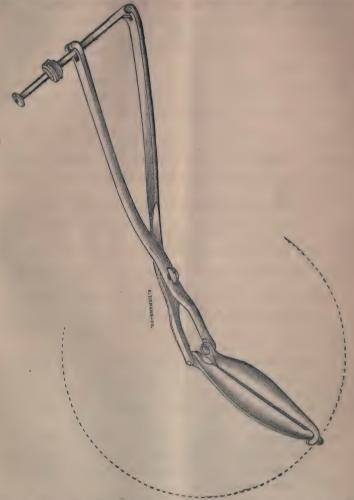
IV. To find the pelvis, after one ovary has been removed, entirely filled by a cyst, the walls of which are extremely thin and delicate at that, is no pleasant discovery. In such a case, however, there is nothing to be done save to manipulate as dexterously as possible, and avoid its rupture. This I believe preferable to tapping from above, or from be-

<sup>\*</sup> Wurzburg Medicinische Zeitschrift, 1865.

<sup>†</sup> London Medico Chirurgical Transactions, Vol. 1. 1867.

low through the vaginal roof, as is strongly advocated in ordinary cases. by my friend Dr. Noeggerath of New York, and has indeed, in quite a number of instances, been practiced by him.

V. To find that no pedicle exists causes me very little anxiety. To most operators it has proved a very serious matter. I have yet to see



the case, however, and I believe there is none upon record, complicated though it may have been, in which, provided it has been possible to complete the operation, the use of my clamp shield would not have effectually prevented severe primary; hemorrhage, or its subsequent occur-

rence. I know that this is a bold assertion; yet I have no hesitation in resting it upon the capacities of the instrument as already proved in practice, and am willing to guarantee the result, where it is properly applied. I here insert a cut of the instrument, which is very neatly made by Tiemann & Co., of New York, and refer those interested in the subject to papers upon its use that have already been published.\*

VI. I believe it best always to endeavour to prevent collapse, by measures resorted to prior to and during the commencement of an operation, for the purpose of keeping the circulation regular, and, by reflex irritation, the general innervation normal. This was attempted in the present instance, and probably lessened the shock, and thus prevented the patient from being lost. As it is, the case goes upon record, as, in its bearing upon the necessity of keeping up efforts for the re-establishment of life till the very last moment, collateral to what is so frequently seen in the successful resuscitation of the still-born fœtus. The persistent employment of a combination of stimuli, among which the brandy enema and flagellation of the extremities were pre-eminent, may serve as an example to be followed.

VII. It is undoubtedly a disgraceful thing to operate, as has been done, only to find both ovaries healthy, and the womb containing a feetus. It is nearly as disgraceful, in these days of a closer differential diagnosis, to find that advanced pregnancy, which had been unsuspected, exists, even though it were obscured by an ovarian cyst; for this is a very different thing from performing the section during pregnancy, after the fact of gestation had been ascertained and the reasons for and against the measures employed had been carefully and clearly balanced. In the case now reported, the probabilities regarding pregnancy were weighed and the result showed the wisdom of the course pursued.

In the present instance the menses had been absent for two months, and yet reappeared subsequently to the operation, although the ovaries had both been removed, and the major part of the Fallopian tubes also. I have elsewhere pointed out the physiological importance of phenomena of this character, different as it is from an ordinary hæmorrhagic discharge, with which it is usually confounded. In my last previous case, also successful, I operated purposely during menstruation; all other operators, so far as I am aware, have avoided doing this. The result was as favourable as could have been desired.†

<sup>\*</sup> Transactions of the American Medical Association, Vol. xvii 1866. p. 107; New York Medical Record, Oct. 16, 1866, p. 385.

<sup>1</sup> Am. Journal of the Med. Sciences, Jan. 1868, p 77.

It will be seen that I employed, both upon the pedicles and the abdominal wound, metallic wires instead of silk. This latter material I have discarded for several years, always employing for operations of whatever character, either the wires or acupressure.

Those patients who die during or after ovariotomy are ordinarily carried off by nervous shock, primary or secondary hæmorrhage, or by peritonitis. I attach great importance to the preliminary preparation of the patient, and, as I have already implied, to a careful after-treatment; points upon which I have lately taken occasion to enlarge at a recent special meeting of the New York Academy of Medicine,\* before which I had been kindly invited to bring for discussion, my new methods of treating the ovarian stump after excision, both of them successful in practice, to which I have respectively given the names of "Capping" and "Pocketing." A modification of the former of these measures was employed in the case now reported, and they are not unlikely destined to take precedence of all other methods in practice, as most rational in theory, and it is to be hoped, practically most successful in averting three of the four great dangers to which I have alluded; namely, hæmorrhage; primary and secondary, and peritonitis. I may add perhaps with justice the fourth danger also, as it is ordinarily diagnosticated; for no doubt very many of the cases reported as dead from shock, have in reality perished from thrombosis or embolism, certain causes of which my new methods will tend to prevent.

There is much more regarding this matter of abdominal sections in which I hold peculiar views of my own. Some of these views are to a certain extent at variance with those generally entertained; but I cannot at this time do more than allude to them. There are many physicians who still doubt as to the propriety of ever attempting the removal of the entire uterus from above, an operation which I have now performed five times; all of the cases having been of dire necessity, and the worst one of them all having recovered; ‡ while in the unsuccessfully four primary hæmorrhage, the more usual cause of death was easily and entirely prevented by my clamp shield. There are those who would hold it little short of homicide, that we should venture to remove, in a desperate case of mbilical hernia, the entire sac by elliptical incision. In a case of my own I employed this novel expedient. The patient died, it is true, but union of the abdominal wound by first intention had been obtained, and the death was from extraneous causes.\* I mention these cases

<sup>\*</sup> New York Medical Gazette, 28th Dec. 1867. p. 106; New York Medical Record, 15th January, 1868, p. 519.

<sup>†</sup> Am. Journal of the Med. Sciences, Philadelphia, Jan. 1868.

<sup>‡</sup> Ibid, Jan. 1866.

only as bearing upon the general question of abdominal section, and s tending to strengthen the hands and cheer the hearts of that great army of the brethren, who, slow to take the responsibility in a doubtful case, are quick and ready to follow a successful precedent. We should not fear, as no doubt many do, the encouragement which the recent grand success of M. Péan in removing the spleen,\* will give to Spencer Wells to renew his own brilliant attempts, and still more, that it will lead others less expert to essay their skill, but rather rejoice that a human life, else lost, has been saved, and trust that still others may be also.

### PERISCOPIC DEPARTMENT.

# Surgery.

CONSIDERATIONS UPON OTORRHŒA, PARTICULARLY IN CHILDREN, AND UPON A NEW METHOD OF TREATMENT.

Communicated to the Imperial Academy of Sciences, April, 1867, by M. Bonna-FONT, Corresponding Member of the Academy. Translated from l'Union Medicale of July 2d, 1867.

All persons are not equally predisposed to this affection; in general we observe it most frequently in constitutions that are lymphatic, strumous, gouty, etc. There are some exceptions to this rule; thus the affections of the ear are often developed after a cutaneous eruption, as scarlatina and rubeola, more particular after the last, without our being able to give the reasons for this preference.

The age at which this kind of otorrhoea ordinarily manifests itself is from six to ten years, sometimes sooner, but rarely later; it is at this time, therefore, that we should hasten to direct an energetic treatment against the disease, for the simplest piece of negligence, on account of the susceptibility and delicacy of the organs of hearing, may allow the most serious lesions to encroach upon this apparatus. At this age, indeed, it is not the deafness alone that is to be dreaded, but even dumbness as the inevitable result of the loss of hearing. Nearly one-third of the children who are found in the establishments for the deaf and dumb, both in France and in foreign countries, owe their infirmity to nothing but the destruction of the apparatus of the middle ear, by neglected otorrhoeas: while it is probable that if these children had been subjected to suitable treatment at the proper time, it would have been successful, at least in a large num-

<sup>\*</sup> New York Medical Record, 16 April, 1866, p. 73.

ber of them, in arresting the progress of the disease, and in preventing thus an infirmity henceforth incurable, which must ever cause grief to the parents' heart.

Prognosis.—The prognosis of this affection is, we think, according to the extent or the seat of lesion; thus the inflammation may occupy the whole surface of the canal, and it may present less of gravity than if it occupied a position even the most limited, in the neighbourhood of the tympanum; in the first case the ear may be for a long time diseased without inducing any disorder of the hearing, while, in the second, it is rare that the tympanic membrane, whether by the continued contact with pus, or by the extension of the inflammation, does not finish by injuring itself, and by compromising, later on, the function of the organ. Besides, another circumstance which renders these ulcerations at the bottom of the canal very much more serious than those which are developed in the regions nearer to the meatus, is this: we know that the glands which se crete the cerumen do not extend beyond the external two-thirds of the canal, and that beyond, the flesh is extremely slight, very red, very sensitive, and applied almost directly upon the bone, from which it is separated only by a very thin layer of the cellular tissue. It follows, from this anatomical disposition, of the greatest importance in auricular pathology, that all that portion of the canal which is provided with glandular tissues may be for a long period diseased, without the subjacent bone being affeeted; while, in a region lower down, the slightest ulceration of the skin attacks, pretty soon, the periosteum and the bone, if we do not promptly ok ok \* arrest its progress.

Treatment.—The first indication to be fulfilled consists in making a careful examination of the canal, in order to ascertain the seat of disease and the degree of its extent. But in general, when we are consulted, it is seldom that the patients, large or small, have not the canal obstructed with matter; it is on this account that we must devote three or four days to these preliminary cases, consisting in cleansing perfectly the canal and in freeing it from all the matters which may conceal the ulcerations; it is for this purpose that I recommend the patient to take, three or four times a-day, ear baths of poppy water, then to make with the same liquid, injections, pretty strong, so that the liquid, in returning upon itself, may bring with it all the foreign matters.

So long as there is no suppuration, it is less essential that the injections penetrate into the interior, but the case is different when pus is thrown out from an ulcerated surface, especially if deeply situated. We can easily understand that if, while the meatus is obstructed by the engorgement of tissues, the suppuration accumulating in the lowest portions of

the canal, will compress the tympanum, will cause its laceration, and later on, its destruction, as well as that of the apparatus of the little bones.

It is to avoid a similar accident, that I have employed for many years small dilating canulas of caoutchouc. Whatever may be the narrowing of the canal, we may always cause a little sound, previously coated with cerate, to gilde in; and when this has been introduced, we can easily cause others of larger size to penetrate. But before replacing a sound by another, we should take advantage of the opening already made to use injections, and to relieve, as much as possible, the bottom of the canal of the purulent matters which may be found there. \* \* \* \*

When the discharge resists our endeavours and threatens to pass into the chronic form, the local treatment should be conducted in the most energetic manner, and by a succession of the means I have indicated. We must always commence by satisfying ourselves, by the use of the otoscope, of the region which the lesions occupy and whence the pus proceeds; when we have recognized the diseased point, we should at once cauterize with a small crayon of nit. silver, such as I use. These little cauterizations, made with care, cause very little, if any pain, and can be repeated every second day.

In the interval we may use astringent and styptic injections, with acetate of lead, of the strength of 1 gramme to 100 grammes of water, sulphate of zinc of the same strength, or, which is excellent, sulphate of alumina, of the strength of 2, 4, and even 6 grammes to the 100 grammes of the liquid. This last is what I most frequently employ, especially since having tried it in the hospitals in gonorrhea, it has given me very satisfactory results.

When this malady appears in a strumous subject, or in a lymphatic constitution, it is very evident that, in this case we should unite the local treatment with an internal medication, the energy and activity of which must be proportioned to the degree of the lymphatic character of the individual.

The local treatment, without being neglected, should be conducted with prudence, and should follow the modifications produced by the constitutional treatment. If on the contrary, otorrhoea be engrafted upon a san guineous constitution, Mr. Kramer counsels, with reason, that we should not attend to the general condition, but should treat the case by purely local means.

In order that medication should be applied in a rational manner, it is necessary to see the parts affected; for it is not an indifferent thing to cauterize healthy tissue, the tympanum particularly. It is for the purpose

of facilitating this examination for a large number of physicians, that I have caused to be made a novel otoscope, very simple, which does not require the assistance of any lamp, and whose shape renders it very portable. This instrument will be found of equally felicitious application in the examination of other organic lesions, such as those of the neck of the uterus, etc.

This instrument has the great advantage of only occupying one hand, of allowing every kind of inclination to be given to the light of illuminating the bottom of canals very obliquely situated, by directing into it a very intense luminous ray.

This otoscope is composed of two tubes: the vertical one, which serves as a handle, contains a small wax candle, such as is used to light up the little altars in the month of May. This tube is pierced at the bottom with many apertures in order to allow the passage of air, which is necessary to nourish the light. The other tube, forming the principal body of the instrument, presents at its superior part a large opening corresponding to the axis of the vertical tube, and by which the flame of the candle escapes. Its posterior extremity is guarded by a small reflecting mirror in plattinum, and the anterior by a bi-senvex lens, the power refraction of which has been calculated so as to make a very great concentration of the flame at the greatest possible distance, in order to fulfil the two following conditions: 1. To cause the greatest possible light to penetrate to the bottom of the auditory canal, notwithstanding its narrowness; 2. Then to leave between the illuminated point and the instrument sufficient space to allow not only of seeing well, but also, with the other hand, to perform in the canal or on the tympanum any operation that may be deemed necessary. This tube may be lengthened or shortened, in order to give to the luminous ray a greater or less concentration, according to the cavities we desire to illumine.

The tubes may be taken apart, and one made to enclose the other, the instrument then is very compact, and very portable.—Southern Journal of Medical Sciences.

#### ST. GEORGE'S HOSPITAL.

CASE OF STONE IN THE BLADDER: LITHOTOMY BY A NEW OPERATION.
(Under the care of Mr. Henry Lee.)

Mr. Henry Lee recently performed and described a new operation, or rather a modification of the lateral operation for lithotomy. The patient was a boy three years of age, who had at one time had retention of urine, and afterwards passed his urine very frequently, and always with pain. The first time he was sounded, Mr. Lee felt a stone; but subsequently

he and other surgeons had sounded without being able to detect anything in the bladder. A week ago, under chloroform, a calculus was again felt; and as the symptoms continued unabated, the operation was determined upon.

After an ordinary grooved staff had been introduced, the operation performed consisted of a straight incision in the median line, extending a distance of a little more than the posterior half of the perinæum between the scrotum and anus, stopping a couple of lines in front of the opening of the bowel. From this point, the incision through the skin was continued outward and backward so as to embrace one-fourth of the circumference of the bowel, at the angle formed by these two portions of the in-The scalpel was then introduced in the median line, with its back towards the rectum. It was then passed forward into the groove of the staff, guided by the finger in the rectum. As soon as it had entered the membranous portion of the urethra, it was withdrawn, and a curved bistoury with a projecting probe-point introduced. The probe-point was then made to slide along the grove into the bladder, the edge of the knife being held to the operator's right side, as in Buchanan's operation. The heel of the knife was then made to describe a portion of a circle corresponding to the external incision; while the point, while being withdrawn, was moved little from the median plane. Mr. Lee mentioned that in this way all the advantages of a free external incision were obtained, with a very small opening into the bladder. The plan had, moreover, the advantage of ensuring that the point of the knife had entered the bladder. was, he thought, an operation the simplest in conception, the easiest in execution, and the least liable to be followed by any untoward accident of all the modifications of the lateral operations for lithotomy. The groove in the staff was reached with great certainty, being felt by the finger in the rectum. The rectum was secured from danger by the edge of the bistoury being directed laterally. But the greatest advantage, especially in operating upon children, he considered to be the certainty of the incision extending into the prostate gland. It was well known that accidents had occasionally occurred from the prostate not being incised. When this had happened, the finger introduced had sometimes pushed the prostate before it; and in this way the prostate had been detached from the membranous portion of the urethra, and pressed towards or into the bladder, so that a cavity was formed without the bladder having been opened.

In the present instance, a very small stone came away at once between the blades of the forceps, together with some very small fragment which had apparently lodged in the urethra. The stone was so small, that it was doubted at first whether it was sufficiently large to give the sensation experienced when the sound had been used. The cavity of the bladder was, however, carefully explored, and nothing further detected. The symptoms had all subsided on the fifth day after the operation. British Medical Journal.

# EPISTAXIS, AND THE MEANS OF ARRESTING IT.

By John Thompson, M. D., F. R. C. S., Bideford.

Hæmorrhage from the nose is most frequent in youth and advanced age; it recurs more often in the former, but is more severe and threatening to life in the latter. I have seen an old man approaching four score lose several pints of blood at one time; and on several occasions elderly people under my care have bled more than a pint at once. The arteries being rigid, atheromatous, and feebly contractile, will explain the severity of the hæmorrhages of the aged. It is generally assumed that, in the young, plethora and sthenia accompany the hæmorrhage. This may be so in many; but I am convinced that, in a large number, if not in the majority, the opposite conditions exist. A florid complexion is not always indicative of plethora, still less of sthenia. I have at this time under treatment a respectable female approaching to middle age, and a resident in the country, who suffers from vicarious epistaxis, whose ruddy cheeks would render her the subject of remark; and yet her system is feeble, and the strongest chalybeates suit her better than salines and evacuants. Again, as the periods of active growth and fast decay are equally the periods of weakness and the seasons of the hæmorrhages, we have a general presumption in favour of the argument for debility.

The ordinary means employed for staying a profuse epistaxis need not be dwelt on; but I will add, that keeping the patient's arms perpendicular will sometimes be sufficient of itself, and it always assists the action of the cold douche and similarly acting agents, the reason of which is obvious.

Many years since I was on a visit in a country neighbourhood, where I was asked to see a gentleman advancing in age who had lost an alarming quantity of blood from his nose, and all the ordinary means failed to arrest the flow. Plugging in front simply prevented the discharge forwards; it made its course backwards into the throat instead. I took a medium sized gum elastic catheter, without stilet, warmed and washed it, then passed it along the floor of my own nostril to the throat, and thus ascertained the length of the passage, which I marked on the instrument. Next I passed it back through the nostril of the patient, and, when I knew the end must have reached his throat, I opened his mouth and seized with

a polype forceps the end of the catheter, which I then drew to his mouth, and tied to it a strong ligature with a pledget of lint attached. By drawing the catheter out through the nostril, the lint was fixed at the posterior nares, and the bleeding arrested. This might have been done by the instrument known as Bellocq's, but it was not at hand, and very probably would not be away from town or hospital in most cases; but a catheter, used in the way I have named, answers so well, and is so easily extemporised, that the more expensive and elaborate instrument can be dispensed with. It seems, also, to me that drawing the end of the catheter to the mouth by means of the forceps, is a better plan than threading the catheter with a ligature and passing it thus armed through the nostril on to the throat, there to be reached with the fingers.

But, however practised, the presence of the pledget at the posterior nares is very annoying and even distressing to a patient, so that it is desirable to avoid it when practicable; and I have found the following method so successful, that I venture to suggest its adoption as a substitute. Strip off a piece of lint about the width of a finger, and twice the length of the nasal passage; double this, and place the bowl end of a director in the fold that marks the middle; then pass the director thus covered along the floor of the nostril till it reaches the throat, lift it somewhat, and then withdraw the director, giving it a wriggling movement in its passage, so as to leave the lint rumpled and loosely distending the passage. The result is, that the blood rapidly permeates and distends the lint, a large coagulum is formed, and the bleeding is completely arrested. This is attended with far less inconvenience to the patient than even ordinary plugging in front, is vastly more effective, and, should it turn out to be less reliable than plugging the nostril behind, is free from the suffering which must attend on the lodgment of a large foreign body over the soft palate, which, in the case of the patient whose case I have named, was scarcely endurable. British Medical Journal.

# PUNCTURE OF THE BLADDER ABOVE THE PUBIS.

By John H. MACKIE, M.D., of New Bedford.

Seeing in your Journal of this week a successful case of puncture of the bladder through the rectum, I am induced to report a successful case of puncture of the bladder above the pubis, that has just occurred in my own practice. Sunday, Oct. 13th, at 9 o'clock, P.M., I was invited by my friend Dr. C. L. Swasey, of this city, to see with him a patient suffering under retention of urine from an impassable stricture. The patient, a Scotchman, aged about 40, was a man of good constitution

and habits, but had been indulging in a slight excess of drinking. At the time I saw him, about thirty hours had elapsed since he passed urine. Dr. S. and myself tried in vain to pass a catheter, and as the bladder was enormously distended, we decided to puncture. Believing that the bladder had risen so high in the abdomen as to preclude all danger of wounding the peritoneum, I plunged a medium sized trocar and canula into the bladder, immediately above the symphisis pubis. Before the urine had ceased flowing through the canula, I passed into the bladder, through the canula, a small gum catheter, withdrawing the canula over it, and leaving the eatheter in the bladder, placed the patient on his side, gave him a good dose of morphine, and left him for the night. The next morning I found him perfectly free from pain; and in the course of the day he passed urine by the urethra. The next morning, Oct. 15th, I removed the eatheter, and yesterday morning, 16th inst., found him "up and dressed." To-day, the external, and apparently the internal, wounds have healed, he passes urine naturally, and is discharged, with a recommendation to have his stricture treated by dilatation. During the case, no medicine was given, except morphine. He was kept in a recumbent posture, and allowed to take nothing except "meal gruel," flaxseed tea, and cold water .- Boston Medical and Surgical Journal.

# ON THE TREATMENT OF ENLARGED GLANDS, ETC.

BY INJECTIONS OF SOLUTIONS OF IODINE AND IODIDE OF POTASSIUM
THROUGH A PERFORATED NEEDLE.

By WILLIAM MARTIN COATES, M.R.C.S, Surgeon to the Salisbury Infirmary.

In the number of the "Medical Times and Gazette" of July 27, 1867, there appeared a short and well-written communication by Dr. Marston, of Devizes, entitled "An Hypertrophied Cervical Gland treated by Injections of Iodine," and in the latter part of the paper is a suggestion that other tumours and enlarged glands, in cases in which the skin has remained unbroken, might be treated successfully in the same manner.

This idea has been familiar to me for upwards of two years, and during 1866 and the present year I have tested it largely, with results of a most important nature and extent. Not only so, but I have succeeded in curing strumous and cold or chronic abscesses without leaving scars, psoas abscess, bronchoceles (cystic and solid), ganglia, enlarged bursæ (including housemaid's knee), thick nævi, strumous disease of joints, an encysted tumour; and in one remarkable case of strumous abscesses,

strumous disease of, and suppuration in, the middle joint of the forefinger, great thickening of the first metatarsal bone, and of the fifth metacarpal bone, every vestige of disease disappeared under this treatment, aided by iodide of potassium, cod-liver oil, and iron, administered internally. The injections were thrown into the midst of each locally affected part in June, 1866. The child is perfectly well, and what is very interesting in this case is, that there is perfect motion of the one diseased and suppurating joint of the forefinger.

In July, 1866, I injected into masses of enlarged glands of the neck, undiluted compound tineture of iodine in the Salisbury Infirmary in two patients, with the effect of dissipating the enlargement in one case and of diminishing it in the other. In neither of these cases was there ulceration. I also injected, in August, 1866, the same preparation into an enlarged post-cervical gland of a gentleman who applied to me for strumous abscesses under both jaws. The gland was of the size of a walnut. It disappeared without suppuration.

In February, 1867, I had the following case under my care in the Salisbury Infirmary:—

A dark strumous-looking boy applied with a mass of diseased glands under the base of the lower jaw, on the left side, with an unhealthy ulcer of the size of a crown-piece. I directed a drachm of the compound tincture of iodine to be injected into the midst of the mass by means of Wood's syringe. This was done by the House-Surgeon. The boy was brought to me two days afterwards, as the swelling and pain of the diseased part were great. A week's poulticing relieved the tension; the glands gradually diminished in size, the ulcer took on healthy action, and in eight weeks it had cicatrised, and now the boy is quite well.

As I am preparing to publish at length the results of this treatment, and have abstained thus long with the view that any paper or treatise I may write may be as complete as possible, I will merely add that I anticipate success in some other diseases in which I have had no opportunity of testing the treatment. I will mention two—ovarian dropsy, and such fibroid tumours of the uterus as can be easily reached by a perforated needle.

It will be seen by reference to the "Lancet" of March 3, 1866, page 225, that I have already published the success of this treatment in "spina bifida, ranula and glandular tumour of the mamma with cysts." Several of my medical friends are trying this my mode of treatment, and I am sanguine of having at my disposal, at no distant period, a large mass of evidence on this important subject.—Med. Times and Gazette.

#### REDUCTION OF HERNIA BY ADMINISTRATION OF COFFEE.

That coffee has a very much more powerful influence on the peristaltic movement of the intestine than tea is pretty generally known; but we doubt whether this action has hitherto been brought into play in the reduction of hernia. The following instance in which coffee was accidentally and successfully employed for this purpose will therefore interest our readers: A man who had for some years a reducible hernia, while overexerting himself converted his hernia into an irreducible one. On being seen by Dr. A. Bourillon, who describes the case, he was suffering from colic and nausea, the pulse was small, and a round, hard tumour, giving a tympanitic sound on percussion, existed in the right groin. The relations of this showed that it was a strangulated right inguinal hernia. The taxis was tried in vain for hours. Applications of belladonna, tobacco, salt, etc., were also unsuccessfully tried. The next day the condition of things was worse, and all efforts to reduce the hernia were fruitless. It was therefore determined to operate on the following day, and the patient was meanwhile ordered to have infusion of coffee (108 grammes of freshly roasted and ground coffee to five cups of boiling water). On coming to operate in the morning, Dr. Bourillon found that the hernia was reduced. According to the patient's own account, the coffee having produced movement of the intestine, seemed to extend the contraction to the hernial sac, which passed inwards suddenly with a distinct gargouillement -Ranking's Abstract, July, '67,

### ON THE TREATMENT OF OZÆNA.

By Christopher Heath, F. R. C. S.

In the Lancet, 1864, Dr. Thudichum called attention to a nov method of cleaning the nasal cavities in case of offensive discharge, depending upon the anatomical fact that when the mouth is open the soft palate so effectually shuts off the posterior nares that fluid will pass from one nostril to the other behind the septum, without descending into the pharynx. Having during the last two years repeatedly availed myself of this method of treating disease of the nasal cavities, I venture to lay my experience of it before the profession, since its merits are as yet, I believe, scarcely appreciated.

Dr. Thudichum, himself, I believe, interfered much with the popularization of his plan by the elaborate details into which he entered respecting the fluids to be used, and the complicated and expensive appar atus he recommended to be employed. My experience does not coincide with that of Dr. Thudichum as regards the irritating effect to the

Schneiderian membrane of pure water; at least, when warmed. Cold water, no doubt, is irritating, as all bathers know, but I never found tepid water cause irritation, even when allowed to run for several minutes. Since cleanliness is the first object of treatment, it is important that patients should have no difficulty placed in the way of the free use of simple water, chemical applications playing but a secondary part in the treatment.

With regard to apparatus for a patient's use, simplicity is of the greatest importance. Dr. Thudichum's apparatus consists of a loaded foot, a brass rod thirty inches high, carrying an arm and ring, in which is cemented a high cylindrical glass vessel, resembling in shape the glass shade of a candle lamp, and capable of holding two pints of fluid. To this a stop-cock and tube are fitted, with a perforated nozzle to go into the nostril. This apparatus is made by Weiss, and is, of course, expensive, and besides, the glass is liable to fracture. Small portable India-rubber reservoirs, with tube attached, have been made to supersede this, by Mathews and others; but the form of tube which I have always employed is by far the simplest, since it can be adapted to any bedroom ewer; and the expense being trifling, each patient can be provided with a tube, so as to employ it daily.

The apparatus I employ is simply a stout India-rubber tube five or six feet long, with a perforated metal weight at one end, so grooved that water can pass through it when standing on a flat surface. At the other end is an ordinary gum-elastic enema nozzle, which may be perforated with more than one hole if preferred. The whole arrangement was contrived by Dr. Rasch, as a vaginal douche, and described by him in the Obstetrical Transactions. For hospital out-patients, I have more than once contrived a very effective instrument out or an old gas-pipe and a piece of sheet lead, but the entire tube as figured below may be bought for five shillings, of Lewis, of the City road, or of Coxeter, Grafton street.

An ordinary ewer being filled with tepid water the weighted end is dropped into it, and the tube "payed in" for two or three feet. The ewer being then raised upon a chest of drawers, or some convenient elevation, the patient squeezes the tube in the water, and draws it over the lip of the ewer, when, being converted into a siphon, the water immediately begins to flow along it. Perfect control can be exercised over the water, by the pressure of the finger and thumb, whilst the patient places his head over a basin and inserts the nozzle into his nostril. On permitting the flow of the water, a stream is immediately established between the nostrils so long as the mouth is kept open; and the current can be reversed, arrested, or diminished with the greatest readiness.

The immediate relief to both the patient and his friends by simply washing out the nostrils in this manner, in a case of ozæna, is very remarkable. Not long since a young-woman suffering from this affection told me that she had lost a situation on account of the offensive odour she exhaled, and begged for a certificate that she would be no longer offensive to others. In this case, on the first use of the tube, enormous pellets of stinking matter came away; and by the subsequent use of a disinfecting lotion she was rendered perfectly comfortable.

The simplest disinfectant is the permanganate of potash; and, in mild cases, this will alone often effect a cure. More active chemical solutions can be employed in suitable cases; and it is by no means necessary to employ large quantities of these, since, as pointed out by Dr. Rasch, by compressing the end of the tube whilst full of water, it can be transferred to a small vessel holding the lotion, and will still act as a siphon.

In addition to frequent washing of the nostrils, I have employed with advantage in cases of ozena, the use of tannin as a snuff, taking the hint from a paper on "on Nasal Polypus," by Mr. Bryant; but a more elegant and perhaps satisfactory way of using the agent is that employed by Mr. Davey of Romford—viz., in solution with glycerine (tannin, one or two grains; glycerine, one fluid drachm; water, one fluid ounce), and blown into the nostril with a spray producer. This has the advantage of more fully spreading through the cavity, and the method may be advantageously employed in those cases of polypus nasi in which the nostril is so completely blocked that the patient cannot snuff up, an instance of which lately came under my notice.

Medicinal constitutional treatment will be required in many cases of ozæna in order to effect a cure; but careful attention to diet and hygienic measures must not be neglected, especially in children of a strumous character. The topical application of nitrate of silver, etc., may be occasionally requisite when ulceration is clearly visible, and ointments may be applied on a camel-hair brush with advantage, near the nasal orifices, so as to prevent caking of the mucus during sleep. In order to examine the interior of the nostril, a good light is necessary either from the sun or a lamp, when, if the rays are properly directed, and the nostril is held open with a director or small spatula, or, if preferred, with a bivalve ear-speculum previously warmed, a good view of the interior will be obtained. I have employed the endoscope in order to examine the nose, and in one instance—a gentleman whom I saw in consultation with Dr. Easton some months back—the nostril had been so dilated by the long continued manipulations of the patient that I was able to use the endoscopic tube ordinarily employed for the examination of the rectum. This patient derived great comfort from the use of the tube to wash out the nostril, but did not continue under treatment long enough for a cure to be effected.—Lancet.

# Medicine.

#### INFANTILE CONVULSIONS.

By John Dickson, M. D., Read before the Baltimore Medical Association.

Of all the maladies of infancy, I know of none more serious, or embarrassing to treat, than convulsions. We are summoned in great haste, and arrive out of breath, and find a painful scene of dismay and confusion which requires our utmost tact and composure to lull. We never get used to spasms in the sense in which we may become stoically or philosophically calm. The malady is too grave and sudden in its effects. and our responsibility too serious for that. We all know that two or three minutes of tonic spasm, or a few hours of clonic, may destroy life, and how much depends upon the prompt and judicious action of the physician, both for the child's safety and his own reputation! Unless the case occurs in our own family, or has been attended with premouitory symptoms, we rarely see a spasm in the tonic stage. The violent and sustained contraction of the respiratory muscle stops the breathing, and death results in a few minutes from asphyxia, as in the first stage of epileptic fits, or in fatal cases of laryngismus stridulus. This, fortunately, is a rare occurrence. We generally find the state, which soon succeeds, of alternate retraction and relaxation, either general or partial; and sometimes confined to very few muscles, as those of the face or hand. In severe cases there is violent jerking of the limbs, abduction of the thumbs covered by the contracted fingers, staring or rolling, insensible eyes, with pupils either contracted or dilated, or there is strabismus in the course of the spasm; the head is drawn backward or forward from the beginning, or it is twisted in rotatory movements; the respiration is quick and irregular, producing a sound of choking as distressing to hear as the contracted, livid face is to witness. When clonic spasm continues some hours, and the rapid contraction and relaxation prevent the free egress of the carbonized air from within the lungs, or the admission of enough pure air to renew the blood, both circulation and respiration are arrested, and death must follow.

Even when this is not the immediate result of the spasm, in many instances it occurs within a short time after it subsides, because these vital functions have been so seriously impaired as to preclude respiration, and

the patient sinks from the shock—as we have heard mothers expressly say "they were struck with death from the beginning of the attack."

But, happily, this is not the most common course of convulsions. There is oftener a gradual subsidence of the fit. The spasmodic movements become slower and cease, the respiration is free, and a general calm succeeds. The patient either wakes to consciousness, or falls into a comatose, or, it may be, natural sleep, after which there may or may not be a recurrence of the spasms. Such recurrences are very common in spite of our best efforts to prevent them, but it is gratifying to know that the danger is not proportionally increased by their frequency. I have seen children have six or seven in the course of the day, and on the following day present no unfavourable symptom or spasm ever afterwards.

Partial spasms present such a variety of forms that I shall not attempt to speak of more than one or two. They may be confined to the superficial muscles only, and to a few of these, and in such cases, the senses remain intact. I have seen the eye, mouth and hand of one side jerking, while the sensibility of the child was perfect; and it would ask for milk and drink it, attempting to hold the cup with the convulsed hand and steadying it with the other. Such are the sequelæ of the more severe attacks, and are easily excited in children so predisposed. Sometimes the muscles of the neck are alone affected, and cause rotation or flexion of the head forward or backward. Indeed, single muscles, as well as sets of muscles, in almost every part of the body, may be convulsed, or exhibit movements under peculiar excitement, nervous or fibrile, which closely resemble spasm, and are at times mistaken for such. Certain organs alone may be affected, as the larynx or glottis, and we have a very formidable trouble in laryngismus stridulus. A child may be seized without any premonitory symptoms of dangerous import, with apparent suffocation, His breathing is suspended, his head thrown back, face and lips livid, and, in a few seconds, the spasm yielding, respiration follows, and a sudden gasp for breath, so urgent as to produce a crowing sound; and the breathing goes on naturally. But there are cases so violent from the repetition of these spasms, as to destroy life during the paroxysm, or lead to general convulsions and coma. Marshall Hall calls this affection "an excitation of the true spinal or excito-motory system." It originates in the trifacial in teething; in the pneumogastric in over or improperly fed infants; in the spinal nerves in constipation, intestinal disorder or catharsis. These act through the medium of the spinal marrow, and the inferior or recurrent laryngeal, the constrictor of the larynx, and the intercostals and diaphragmatic, the motors of respiration. We can judge from this that a great variety of causes, as in general

convulsions, may produce this form of spasm. Dr. West mentions a case in a child only ten weeks old, from improper feeding; another, of nineteen months, from sudden suppression of chronic diarrhœa; another, of two and a half years, from cerebral congestion following constipation; another, of nine months, during the course of chronic hydrocephalus; and in another, who died at the age of two months, it appeared as a transitory symptom during a series of convulsive attacks, for which no cause could be assigned during life, and which left no traces that could be detected after death.

The obscurity of origin and abscence of pathological indications often throw a veil of mystery over cases of convulsion, which the clearest sighted of us cannot penetrate. We know that hereditary influence is the most frequent predisposing cause, that eclampsia in the mother before parturition, or much further back when she was herself a child, is apt to be followed by the same tendency in the offspring; though it by no means follows so often as to establish it as a rule.

A remarkable illustration of hereditary influence is quoted by Trousseau from a thesis of Dr. Duclos of Tours. The case is that of a woman, thirty-four years of age, who had had frequent attacks of eclampsia up to the age of seven. These had left behind slight deviation of the mouth and ptosis of the left upper eyelid. This woman had ten children, who all had convulsions; six had died, five in the first two years, and one when three years old. Three months previously, she had a first attack, which lasted about ten minutes, and which her mother ascribed to her having given the breast to the child immediately after a fit of passion, as the convulsion occurred on the ensuing day. Death took place three months afterward, from cerebro-meningitis.

Loss of blood, whether in direct hæmorrhage, venesection, diarrhæa, or hypercatharsis, strongly predisposes to convulsions. Insufficient nourishment and exhaustion, from whatever cause, have the same effect. Hippocrates' observation that the "blood is the moderator of the nerves," corresponds with the present physiological law, "that in proportion as the nutritive and vegetative functions are feeble and languishing, nervous phenomena are mobile, exalted and irregular." The sensitive brain, with its spirit-like nerves prevading every part of the organism, must be supported by the vascular system, as the string and wind instruments of an orchestra combine; the measured wave sounds of the latter, giving volume and tone to the tender strains of the former, without which it would be only a flutter of distracting discord. The iron of the blood is as much a fundamental base in toning the system, as the brass instruments are in sustained musical harmony. It may be upon this theory

that Chapman uses ice bags along the spine in so many affections where nervous symptoms predominate. "He considers that ice applied along the spine increases the general circulation, stops the cramp of voluntary and involuntary muscles, proves an effective remedy in epilepsy and other convulsive affections, cures sea-sickness, restrains the sickness of pregnancy, arrests diarrhea, recovers patients from the cold stage of cholera, and, finally, promotes menstruation. On the other hand, heat along the spine lessens the general circulation, overcomes congestion in all parts of the body, lessens fever, restrains hemorrhage and lessens or arrests the menstrual flow." If by exciting or depressing the spinal cord, by heat or cold, such remarkable effects can be produced upon the circulatory system, we can readily see how disorders of the latter may prove disastrous to the nervous system. To work out this would be very interesting, but would require more time than I can give it. The fact is, that every thing that impedes or arrests healthy circulation, or impairs the quality or quantity of the blood, may tend to bring on convulsions, and may be ranked among the predisposing causes. The exciting causes of convulsions are very numerous, and upon them, when we can discover them, we base our immediate treatment of an attack. When arising from indigestion, how often have we cut short the spasm by an emetic or enema, when nature herself has not done the work for us, which she frequently does, and when constipation is the cause by relaxing the sphincter and evacuating the loaded intestines. But these measures often fail, and in spite of the inevitable warm bath and counter-irritation, which the child's friends have applied before our arrival, the convulsion goes on unabated; and if we do not arrest it, the child may die in the fit or from the supervening coma. Almost all the antispasmodics have been used for this purpose, and some of them with good effect at times, but no agent is so powerful or requires more skill in administering than chloroform. Some bear it very badly, and we discover the flagging of the pulse or the stertor of the breathing very soon after its application, and we must desist before any good can be done by it. In other cases its use may be kept up for a long time with no bad effects, and the convulsive action controlled. In severe cases I have seen the chloroform used freely for several hours, and the child recovered perfectly, when without it the paroxysm would have undoubtedly exhausted the nervous system, or produced cerebro-meningitis, or effusion and resulting paralysis. Such are often the results of convulsions, besides deformities from rupture of muscles, squinting, nervous excitability, epilepsy, etc., though by no means occurring in a large proportion of cases. In some children convulsions are easily excited and readily controlled, and the

agent which I have found most valuable for this purpose is bromide of potassium. There is still a good deal of skepticism on this point, but I think where it has been used and persisted in, there is no doubt of its efficacy in preventing and subduing nervous excitability. I have given it, when the convulsive tendency was the result of impoverished blood from previous disease, in conjunction with wine and beef essence, with the happiest effect.

Of the effect of ice to the spine I have no testimony of my own. Dr. Edmunds, in the *Medical Times* of March 12th, 1864, after relating a case of spasm in a woman which was perfectly relieved by this means, says: "I had seen Dr. Chapman's brochure on the subject of his discovery, and also his paper in the *Medical Times and Gazette*, but thought the idea too pretty to be anything more than a plausible theory, until my own child being in great danger from an obstinate laryngismus, connected with dentition, I tried the ice bag to the cervico-dorsal portion of the spine, at the suggestion of Dr. Ramskill, and it has certainly done more to keep off the strangling attacks than anything else.

Lancing the gums when the convulsions occur during dentition, sometimes produces immediate relief, and, if they occur during that period, it should be our first duty.

Convulsions which take place at the outset of fevers, from the first impression of the poison upon the system, are not as serious as those which come on towards the close, and seldom require special treatment. It is a disputed point whether the prognosis from such is favourable or not. Worms, sunstroke, extremes of temperature, blows upon the head, sudden fright, severe burns, and local irritation of various kinds, are among the exciting causes of convulsions, and indicate the course of treatment. Calomel has been given very largely in convulsions, as a purgative, anthelmintic and absorbent. We must bear in mind its destructive tendency, and have a distinct purpose in view, the accomplishment of which is paramount to the risk of using such a depleting agent. If we give it to promote absorption of effused serum in the brain we may obviate its injurious effects and increase its efficiency by taking especial pains to nourish and support the general system at the same time, with all the means the patient will bear,

This plan was successful in my own little girl, who was two and a half years old when she was attacked with a violent convulsion, after a day or two of gastric irritation, from which she seemed to be recovering, when, without any warning, she was seized with it, and, in spite of chloroform and everything else we could do for her, it lasted five and a half hours. The right side was most affected, and, after the convulsion, remained

paralyzed for several days, but recovered under the use of small doses of calomel combined with bromide of potassium, and wine, milk, and beef essence. There was a convulsive state for some weeks afterward, which seemed to be controlled by the bromide, and partial convulsions occurred without loss of consciousness, for some days after her recovery from the comatose condition which immediately followed the convulsion. The paralysis left the foot first and she could walk well for some days before she could hold anything in her hand, but that gradually regained its use, and lastly, her tongue, which had remained silent for four weeks, began to liberate itsef, in monosyllables at first, and she slowly recovered her vocabulary, as if she had never talked before. This case, which I had hoped to give more in detail, was one of intense interest and anxiety to me, and the care and responsibility of the treatment was most kindly and faithfully shared by our worthy President, (Dr. Williams). She is held up in our neighbourhood as a triumph of medical skill, and an encouragement to parents, as well as doctors, to hope for the recovery of their little ones under the most discouraging circumstances.

IODIDE OF POTASSIUM IN THE TREATMENT OF CACHEXIÆ AND OTHER DISEASED CONDITIONS.

By Sir Henry Cooper, M.D., F.R.C.P., Senior Physician to the Hull General Infirmary.

Few drugs have been more thoroughly tested by the medical man within the last thirty-five years than iodide of potassium; and we might reasonably have concluded that its uses and modes of application were definitely known to the profession. Yet some new applications have recently been made of it which give us further insight into its therapeutic power, and particularly as regards the dose and combination. Of these I propose in this communication to give a few cases, and to attempt something of a generalization.

From its containing so large a proportion of iodine, the iodine was at first considered to be an irritant of the capillary circulation; and it was accordingly employed, locally or generally, to remove thickened structure and homologous deposits, particularly in glandular and fibro-membraneous tissues. It was soon found, however, that important general results followed its use in the numerous and intractable class of chronic cachectic ailments, the sequelæ of past acute diseases, or the manifestation of hereditary taint. Thus chronic syphilitic and rheumatic diseases were found to be under its control; and it was hastily inferred that the remedy would be equally effectual in other cachexiæ. Hence it came to

be, in combination with decoctum sarsæ, a too ready refuge in lingering, obstinate, and obscure affections indiscriminately; and disappointment and temporary neglect of its real merits were the inevitable result.

But the iodide had substantial merits of its own, so that its use never ceased from among us; and it is again, perhaps, in greater, certainly in more rational, request than ever. It has never ceased to be used as a prompt and certain remedy (specific?) in periostitis, and is relied on for this purpose as much as quinine is for ague, or arsenic for squamous skindiseases. It is, however, as a remedy in cachectic conditions, and as a controller of the secretion of mucous surfaces, that the iodide has lately attracted attention; and it is in these relations, particularly in the former, that I wish to speak of it in this communication. The cachexize of syphilis and of chronic rheumatism, whether in their early or in their later manifestations, always forms a large proportion of our hospital and dispensary practice. The latter, in fact, is the heaviest burden imposed on the labour of the officers and the funds of the institution. I have for some years treated such cases of chronic rheumatism with five-grain doses of the iodide and cod-liver oil, with tonics and good diet, as individual cases required; and generally with fair success. Still there always remained a residuum of intractables, on which little impression was made. Patients advanced in life, with broken health, impaired digestion, torpid functions, anæmia, and emaciation, and with painful and swollen joints, are apt to resist these and many other modes of treatment, except, perhaps, on their first application. So, again, cases of sciatica or other neuralgiæ, under like general conditions, where the strength has been much reduced, defy the same means, even when supplemented with any amount of iron or arsenic. With regard to syphilitic cachexia, we have not generally the same amount of depression or general derangement; but still cases are constantly occurring in which no recognised remedies appear to tell. This is particularly so where there are nocturnal pains rather than nodes, and where the skin is decidedly affected; but more especially wherever the general cachexia is the most strongly marked. Now, in all these cases, I have lately tried, and in some with marked success, very large doses of the iodide-i. e., from gr. xxx ter die. This practice is not new. Dr. Elliotson proposed it many years ago, and it has been again strongly recommended lately in the metropolitan hospitals; but, so far as I know, no attempt has been made to fix on the class of cases adapted for it, or to establish the principle that it is applicable to the cachexia, rather than the local or specific disease.

There is a strong natural reluctance to the use of large doses of che-

micals of which the components are individually active, not to say poisonous. One drachm of iodide of potassium represents a poisonous dose of iodine; and yet thirty-grain doses may undoubtedly be given three times a day with perfect impunity. Nay, more, the occurrence of physiological symptoms, as coryza, is almost unknown where the large doses are given. As I wish this paper to be practical, I shall abstain from any speculation as to the causes of this tolerance, and, indeed, from any attempt to determine the theory of the therapeutic action of the remedy; but shall at once refer to cases in illustration of my views.

CASE I. Henry Hoogensen, aged 29, was admitted November 9th, 1866. He was a robust, muscular, large-made seaman, but was now looking haggard, depressed, and attenuated. He had copper rash on the forehead, breast, etc., and nocturnal pain with old swellings of the smaller joints, and scars of ulceration on the penis and tonsils. He had been three months under the treatment of an intelligent and experienced surgeon, but said he was getting worse. During this time, he had been taking five-grain doses of the iodide. He was put under cod-liver oil, decoction of cinchona, with nitric acid, and full diet, with a view of restoring his shattered health, before specific treatment was begun. The improvement was trifling; and, a fortnight after admission (Nov. 15th), he began ten-grain doses of iodide, which were rapidly increased by daily additions till they arrived at twenty-five grains three times a day. He improved sensibly from the commencement of the large dose system, and left the hospital in robust health, and without pains or eruption, in the fifth week-the third of the large dose treatment.

CASE II. James Anthorpe, aged 27, contracted syphilis four months ago. He had been more or less under treatment ever since. On April 18th, 1866, he came into hospital with old nodes, copper eruption, nocturnal pains, and general feebleness and wasting. He was put, after slight preparation, on the large dose system (gr. xx of iodide), and left the house in good health May 4th.

CASE III. A gentleman, aged 32, applied February 4th, 1867. He was covered with copper eruptions, and complained of nocturnal pains. He was in bad health, having lost flesh, strength, and appetite. He took the iodide in such doses ( \( \frac{7}{3} \) ss) that a country druggist refused to make up the perscription, and sent it by post to me for correction. The early progress of this case was most satisfactory, and for one month he improved rapidly. He then had some return of his rash; but his health was re-established, and he had lost his pains. In this state he now continues (May 1867); but he insists on continuing the medicine from time to time, as he is convinced that it controls the rash.

CASE IV. A gentleman agod 3S. The case was very similar to the above, but the cruption on the face was more disfiguring, and was complicated with acue. His general symptoms quite disappeared in three weeks, under the use of twenty-five grain doses; but the skin disease is more intractable. He, too, insists on continuing the medicine, from his conviction of its efficacy. He is now (May 30th) quite well.

Case v. The case of John Bush, aged 30, shows that the maximum doses are not always required. He was admitted into the hospital December 18th, 1866, having slight constitutional symptoms and pains in the large joints, and copper stains on the forehead and arms. He had primary sores and sore-throat four months ago. He began with a three grain dose of the iodide, which was raised to thirteen grains three times a day, but not further increased; and he was discharged cured June 10th 1867.

CASE VI. F. Goring, aged 29—a more recent case, but still marked with cachexia. He had primary syphilis two months ago, and now presented two large nodes. He took twenty-five grain doses of the iodide three times a day, and left the hospital cured.

Case VII. A young recently married gentleman had primary syphilis many months ago, and supposed himself well and justified in marrying. Both himself and his wife had copper stains and indurations about the genitals when he applied to me, and I had no hesitation as to their syphilitie character. They have taken the iodide in twenty-grain doses, and are free from the rash while they are taking it; but, as in the above cases, the rash re-appears when it is discontinued, though the other symptoms are cured. It would appear that the general or cachectic character of the symptoms should be our guide, rather than the history or duration of the case, though no doubt this character is more marked in proportion to the duration. Where, however, the characteristic rash and loss of strength and general health occur even while primary sere is present, the large dose system may be used with advantage (the ineculation having probably been from a tertiary case).

CASE VIII. A medical gentleman in midwifery practice, had a suspicious sore on his finger in March last, and treated himself on the suspicion that a parturient patient might have affected him. In April, he had cruption and general loss of health. He began to take the twenty-grain doses, and is now well.

The following case may lead us to hope that the interesting and perplexing cases of syphilitic cerebral disease, on which so much light has recently been thrown, may prove to be under the same control.

CASE IX. Thos. Butterfield, aged 36, a robust town labourer, had

teen labouring under the postponed forms of syphilis in a severe form for many months, and for the six months preceding the present notice, was the subject of necrosis of the parietal bone, cruptions, and nocturnal pains, for which he had taken the ordinary remedies with very indifferent success as an out-patient. We had lost sight of him for several weeks, when he reappeared January 7th, with strabismus, giddiness, loss of memory, and confusion, and in a very emaciated condition; the external symptoms of disease remaining very much as before. After some preparative treatment, the full doses of iodide were given; and all apscial symptoms were removed, and his general health re-established, on February 10th—the necrosed bone remaining in the same state as before. He continues an out-patient, in good health.

With this case I close my list of syphilitic cachexise treated by this method. I have had nothing so decisive to adduce in regard to rheumatic cachexia. In fact, I can only state in general terms that, where I have employed large doses, great amendment of general symptoms has usually followed, and sometimes much local relief. But there is undoubtedly more tendency to the recurrence of the disease; in fact, the local symptoms are never entirely overcome. In sciatica, I have succeeded by this method in two very obstinate and protracted cases, which had long resisted treatment.

CASE X. Henry Robinson, aged 27, after for many weeks suffering from acute pains in the sciatic and its branches, and being much reduced by loss of appetite and sleeplessness, began the large doses of iodide on March 13th, rapidly increasing them to twenty grains three times a day, and on the 18th of April he left the hospital free from the complaints. And Stephen Sprag, aged 30 (both farm labourers), had been suffering similarly, and almost to the same degree for three months. He commenced the twenty-grain doses on the 21st of March, and on the 3th of April left the house in his usual health. In both those cases, and, to the best of my belief, in all here narrated, the iodide had previously been given for some weeks in five-grain doses without effect; and the change followed so directly on the large doses as to justify its being attributed to their influence. In neither case has there been recurrence.

In the treatment of these cachexize, I do not exclude regimen and dietetic adjuvants, though I admit I have made the treatment in the above cases as pure as possible, to avoid the risk of fallacy. But I do not doubt that the old methods of skin-elimination, by external or internal means, or by a combination of the two, as in the "Zitman method," would greatly assist. At all times, the vehicle of the iodide may with advantage be the decoction of sarsa or of the "woods."

I would add a few remarks on the action of the iodide on the mucous surfaces. In a certain proportion of cases, the salt, in ordinary medicinal doses (say gr. iii. to iv.) will produce irritation of the Schneiderian membrane and coryza; but, as I have already said, this is not the case where a large dose is used. This, I think, points out that the small doses are more likely to affect the mucous tracts generally than the large, and should lead us to employ them when we have this object in view. My observations have chiefly had reference to the pulmonary membrane; but there is good reason to believe that the other tracts, and perhaps more notably the genito-urinary of the female, are amenable to its influence. I will cite two cases of very severe capillary bronchitis, in which I believe relief was afforded more rapidly by the use of the iodide, combined with a very small dose of tartarised antimony, than would have resulted from the use of either remedy alone—certainly, than if the tartarised antimony only had been used.

Case XI. J. Skerat, aged 48, a town labourer, subject to chronic bronchitis, was seized with a very violent attack of dyspnœa and lividity in the early days of March, and was admitted into the hospital in a very alarming state. There were physical signs of minute bronchitis over both lungs; and his general symptoms corresponded with this local condition. He had stupes and expectorants, with one-eighth of a grain of tartarised antimony, for several days, with partial relief; and on the 25th he began to take three grains of iodide of potassium, with one twelfth of a grain of tartarised antimony, every three hours. From his commencing this treatment, his improvement was very marked, and he was convalescent on April 18th.

CASE XII. W. Hudson, a traveller aged 48, exhibited on admission (Feb. 21st) a very similar condition. His respiration was 40; his cough incessant; and he expectorated half a pint of muco-purulent fluid in twenty-four hours. Small moist rhonchus was heard throughout. On March 2nd, he began the same doses as in the former case; and his improvement was equally immediate and satisfactory, as he was quite convalescent on the 20th.

I have notes of other cases in which some advantage seemed to result from the treatment, but none so decided as these; but the cases in which no benefit seemed to result were very few.

The efficacy of the large dose system in the cachexiæ, and notably in syphilitic cachexia, seems to be established, not by the few cases here adduced, but by their accordance with many others now on record, and to which I have seen an addition within a few days. The action of the drug upon mucous diseases I purpose still to continue to investigate; and

I hope that ere long we may have arrived at that stage in the accumulation of facts which will justify an attempt to generalise with more confidence, and to extend by induction the application of the resulting laws. British Medical Journal.

#### CAN TYPHOID FEVER BE ARRESTED?

Dr. Strong, of Buffalo, (Buffalo Medical and Surgical Journal,) answers this question in the affirmative. He thinks he has accomplished the purpose by applying a blister to the iliac region as soon as the diagnosis is established, and repeating it, if necessary. The practice is not exclusively original with Dr. Strong. We have employed it repeatedly, and we believe it has been used by several other physicians in California. The only wonder is that, in view of the pathology of the disease, counter irritation to the iliac region, or some other system of topical treatment, is not universally adopted. Perhaps the authority of Louis, who prohibited blisters altogether in typhoid fever, has determined the general course of medical practice in this respect. In spite of that high authority, we are inclined to concur with Dr. Strong. Further, there is a great variety of topical means besides vesication, which may be resorted to.—Pacific Medical and Surgical Journal.

OBSERVATIONS ON THE TREATMENT OF ZYMOTIC DISEASES BY THE ADMINISTRATION OF SULPHITES.

By Professoa John Polli, M.D., Milan; Honorary Member of the British Medical Association.

It has been long admitted in medicine that there are diseases whose cause and origin is a specific ferment, either generated within the system, or introduced from without. Such would be, for example, the different viruses, contagious poisons, miasmata, etc. These morbific ferments, inducing a special decomposition of the blood or of the humours, would seem to generate that series of maladies which we term zymotic, and which would seem to depend on the efforts made by the morbific process either in the assimilation or in the attempts at expulsion of the diseased heterogeneous products, and in the resulting reaction of the nervous system against the inquination of the newly formed blood. When time and strength are in sufficient quantity to enable him to eliminate the products of the fermentative decomposition of the blood, the patient recovers. When, on the contrary, the inquination of the blood is greater than what can be eliminated by the vital force of the patient, he dies. It had long been the fervent desire of physicians that some means might

be devised of neutralising these morbific ferments; but, up to the present age, it had still remained unaccomplished, as, of the many substances which were known to have the power of neutralising ferments, none had yet been found which could be employed with safety; as all those agents which were known to have a sensible power over such ferments were always of so destructive a nature as to render their administration inconsistent with life—for instance, arsenic, chlorine and the hypochlorites, nitric acid, hydrocyanic acid, bichloride of mercury, etc. But while these are, no doubt, strongly antiseptic agents, and adapted to preserve dead specimens of the vegetable and animal kingdoms, they cannot with impunity be administered to living bodies. A substance was still to be discovered, which, while possessing the power of rendering organic matters incapable of being acted on by those fermenting principles, would at the same time exercise this function without in any way endangering any of the vital processes.

During a long series of researches, dating from 1857, and undertaken with the view of studying the different fermenting processes of organic matters which seemed to bear some analogy to the different morbific alterations of the animal economy, I came to the conclusion that in sulphurous acid we possess the most active agent in arresting all fermenting processes, even those over which arsenic and hydrocyanic acid have no power, such as synaptasic and saligenic fermentations (see Piria and Bouchardat); or those which are not arrested by phenic acid, as the diastasic, myronic, pepsinic, and ptyalinic (see Lemaire). But sulphurous acid cannot be administered as gas, except largely diluted with air; nor as an aqueous solution, except largely diluted with water; and its local action, besides, is always difficult to tolerate.

I then turned my attention to its combination with the alkaline and earthly bases, such as sulphites of soda, potass, magnesia, lime, etc., and the hyposulphites of the same base, which last, during their passage through the animal economy, become sulphites and bisulphites by the absorption of oxygen; and I was delighted to find that these salts possessed all the properties of free sulphurous acid, with this advantage over it, that their action is more uniform, more constant, and even more intense. Proceeding with my experiments, I administered all these sulphites to dogs, and found that they were perfectly tolerated even in large doses and continued for a long time. I also took large doses of these salts myself, and administered them to friends who were willing to undergo the experiments, in doses of from eight to twelve grammes in twenty-four hours, without experiencing the slightest inconvenience. I also found that those animals which had been fed with sulphites for

some days, and then killed and dissected, resisted the putrefactive decomposition for a long time, and remained fresh when other dogs which had been similarly fed and then killed, but had not previously received any sulphites, had long passed into a state of decomposition. I also found that whilst I could, without any apparent inconvenience, take even as much as fifteen grammes of sulphite of magnesia in the day (I prefer this salt, as it is almost tasteless, and contains a larger quantity of sulphurous acid), I lost all feeling of thirst; that my excrements had lost their usual faccal smell, which was replaced by the smell of pure sulphuretted hydrogen; and that the urine emitted during these experiments remained fresh, acid, and clear, and did not undergo the ammoniacal fermentation (see Van Tigem) for eight or ten days during the hottest Italian summer; while my urine emitted both before and some days after I had taken the sulphites became ammoniacal, feetid, and covered with fungoid growths, in from five to seven days.

In another series of experiments, I tried the effects of the sulphites as prophylactics and as curative agents on animals in whom a septic disease had been artificially induced by injecting into their veins different animal poisons, such as putrid blood, feetid pus from unhealthy abscess, and the discharge of glandered horses. The result of these experiments practised on dogs, and variously conducted, proved to evidence that sulphites had the power in some instances of entirely preserving the anima from the action of these morbific ferments, and in others to enable the animal, after a short illness, to regain its health: while, in almost every instance of septic injection, the administration of sulphites was sufficient to effect a more or less rapid cure of the typhus or typhoid fevers induced.

After such results, I had nothing more to do than to invite the medical profession throughout the world to undertake the clinical experiments with these salts, of which I had already determined the mode of action and the dose in all those diseases in which one might suppose by analogy that the morbific process was a kind of fermentation in the blood, or an induced alteration of the nutritive process, by the presence of an agent operating as a ferment. Such, I believe, would be the case in the various eruptive fevers, measles, small-pox, scarlatina, miliary fevers; in intermittent and other marsh-fevers produced by paludal miasmata: in typhus and typhoid fevers, either epidemic or contagious; in purulent absorption, as in puerperal fever; in fevers consecutive on serious surgical operations, and after dissecting wounds. This call was most freely answered by the medical men of Italy, as well as by some foreigners, among which last I feel happy to name Dr. H. R. de Ricci of Dublin, who was the first—viz., in 1862—to give a full and valuable report of

my first researches on the subject; and who invited his professional colleagues to test the real value of these sulphites by repeating the clinical experiments which he had already initated; also Dr. W. Jackson Cummins of Cork, who proved successfully these salts in scarlatina, both as curative agents and as prophylactics; also Dr. Hayden, of the Mater Misericordiæ Hospital, Dublin; who tested very accurately the hyposulphites in diphtheria

I published my first memoir on this subject in 1861, and since that time one hundred and forty-eight papers have been published in answer to my call; and, with the exception of five or six, containing some criticisms on my labours, all the remainder confirm in the strongest terms by many hundreds of detailed observations, the value of these remedies in the diseases above mentioned. By means of the sulphites, the course and sequelæ of eruptive fevers are entirely under control, mild cases being rapidly cured, and aggravated ones being rendered mild. In intermittent fevers, the same results are obtained; and here I have had the most extensive opportunities of trying this new remedy, as, in consequence of the special condition of Lombardy, and the vast area of land constantly under water for the cultivation of rice, paludal fever is the most frequent malady in our hospitals. I have found that I could conquer the most rebellious malarious fevers of every type, either quartan, tertian, or remittent, by employing sulphites only; and hundreds of case streated by numerous provincial doctors, and by them published, corroborate my experience that not only are the sulphites equal to quinine in the treatment of the various forms of ague, but that they are even superior to it, inasmuch as patients treated with them are much less liable to relapse. These facts are so well known and appreciated in Italy, that the Royal Lombard Institute has established a prize of 2,500 francs (£100) for the best essay "On the Use of Sulphites in Fevers, as compared with other Remedies."

Sulphites have also been used with great success in petechial typhus, in typhoid fever, and in the peculiar fever which follows in cholera; and many papers have been published, establishing these facts, by many of the principal Italian physicians.

Sulphite of soda, as a lotion, has also been extensively tried by many surgeons in the treatment of external sores; and I shall here only mention Dr. Burggræve of Ghent, who seldom, if ever, uses any other dressing on all suppurating surfaces, and who has placed on record that the results of this medication, both internally and externally, are no less marvellous in the treatment of cases of purulent absorption, gangrenous infection, puerperal fever, dissecting wounds, etc. So much is this sul-

phitic external treatment of all forms of wounds and sores, whether simple or with a tendency to gangrenous degeneration, gaining ground in Italy and other parts of the Continent, that in many places it has completely superseded the use of all other dressings; and, at this time, Professor Gritti, surgeon-in-chief to the great hospital of Milan, never uses any other external dressing, for not only does it prevent any fermentative process in the parts to which it is applied, but in many cases its immediate action is that of an anæsthetic; but it also destroys all bad smells; it is inodorous in itself, and colourless—a great and positive advantage, and one which cannot be claimed by many disinfecting substances, as coal-tar, phenic acid, the permanganates, etc.

In concluding this compendious communication, to which you have lent so courteous an ear, I beg to recommend these sulphites to your clinical experimentation. For internal adminstration, in a curative point of view, I reccommend the sulphite of magnesia, both as containing more sulphurous acid, and also as being pleasanter to take. As a prophylactic, I recommend the hyposulphite of soda, when it does not act too much as a purgative; and, for external use, I advise the sulphites and bisulphites of soda, which are more soluble than the magnesian salts. On trial, these sulphitto preparations will be found of much value in more particulars than one. The sulphite of magnesia wil! always be tolerated by the stomach, even in extreme cases of irritation. It never acts as a poison, and therefore an erroneous dose will never be productive of evil-a quality which it alone possesses among those remedies which have any decided value. Its extreme cheapness is another merit; it is, perhaps, the cheapest remedy in the whole materia medica; and, when its real value has been ascertained, its cheapness will still more be appreciated.

I do not put forward these sulphitic salts as a panacea. I wish my professional brethren to put them to the test of clinical experiment; and I shall feel indebted to them more for the notes of their unsuccessful cases, if accurately observed, than of the favourable ones.

And now, in conclusion, let me observe that these salts do not act as poisons towards the several morbific ferments, which we have supposed to be the cause of the several zymotic diseases. They do not kill the catalytic germs of the organic poisons; but they react on the material components of our own organism, rendering it by their presence, incapable of being acted on by these catalytic germs. It is, therefore, easily comprehended how extensive and beneficial must be the use of these sulphites, when it is remembered that among zymotic diseases we class the most numerous, the most obscure, and the most fatal of all diseases.—British Medical Journal.

A NEW METHOD OF RESUSCITATION FROM HYPERANŒSTHESIA BY CHLOROFORM.

At a recent meeting of the New York Academy of Medicine, Dr. Worster read a case in which chloroform had been administered to a patient, by a party whom he regarded as competent, as a preparatory step to an operation, by himself, for the relief of hæmorrhoids. Suddenly the patient had stertorous breathing, became pulseless, and exhibited all the symptoms of a speedy dissolution; but by the simple expedient of reversing his position, and inclining his body to an angle of forty-five degrees, he was fully restored.—N. Y. Med. Record.

# Midwifery and Diseases of Momen and Children.

HOW TO PRODUCE THE SEXES AT WILL, AND HOW TO PREDICT THE SEX OF THE FŒTUS.

We lately called these hard questions, and certainly they are so. But what could be more important than to be able to produce male or female children, as we wished? To control as might be desirable, the per centage of sexes in a population? To bring about that happy equipoise when there would be no sighing maids at home, nor want of warriors in the field?

Many a plan has been suggested, and perhaps among them some have not received the attention they merit. Some physiologists have supposed that one ovary produces males, the other females. The suggestion has been made, that did the woman, immediately after congress, lie a while on one side, she would always have one sex for offspring. We have learned from a lady who tried this in eight conceptions, that turning on the left side produced always males, on the right, females.

But a more plausible theory is that of M. Thury, professor in the Academy of Geneva. He observed that the queen-bee lays female eggs at first, and male eggs afterward: that with hens, the first laid eggs give female, the last, male products; that young bulls, who meet the female at the first signs of heat, generate heifers more frequently than old bulls who are exhausted and do service later; that mares, shown the stallion late in their periods, drop horse-colts rather than fillies. He formulated, therefore, this law for stock raisers: "If you wish to produce females, give the male at the first signs of heat; if you wish males, give him at the end of the heat." We have before us the certificate of a Swiss stock grower, son of the President of the Swiss Agricultural Society, Canton de Vaud, signed in February of the present year, which says, speaking of the accuracy of this law:

" In the first place, on twenty-two successive occasions, I desired to have heifers. My cows were a Schwitz breed, and my bull a pure Durham. I succeeded in these cases. Having bought a pure Durham cow, it was very important for me to have a new bull, to supersede the one I had bought at great expense, without leaving to chance the production of a male. So I followed, accordingly, the prescription of Professor Thury, and the success has proved once more the truth of the law. I have obtained from my Durham bull six more bulls (Schwitz-Durham cross) for field work; and, having chosen cows of the same colour and height, I obtained perfect matches of oxen. My herd amounted to forty cows of every age.

"In short, I have made in all twenty-nine experiments after the new method, and in every one I succeeded in the production of what I was looking for-male or female. I had not one single failure. All the experiments have been made by myself, without any other person's intervention; consequently, I do declare that I consider as real and certainly

perfect, the method of Professor Thury."

In August, 1863, M. Thury submitted his plan to the Academy of Science at Paris. It was tried on the recommendation of that body, on the Emperor's farms, with, it is alleged, the most unvarying success.

A farmer in Louisiana writes thus to the Turf, Field, and Farm, in reference to this law, as applied to men. "I have already been able in many cases to guess with certainty the sex of a future infant. More than thirty times, among my friends, I have predicted the sex of a child before the birth, and the event proved nearly every time that I was right."

The idea was not new. As long ago as July, 1863, Dr. Packam, of Wimborne, wrote to the London Lancet that, " In the human female, conception in the first half of the time between menstrual periods produces female offspring, and male in the latter. If a woman is "out" in her reckoning, if she goes beyond the expected time, the babe generally turns out to be a boy."

The husband, therefore, who would, with Macbeth, say to his wife, " Bring forth men-children only,"

let him avoid exposing her to conception during the first half-term of her inter-menstrual period.

The value of this as a means of prognosis is obvious. It may be assisted by other observations. That, as many old nurses say, there is any difference in the figure of a pregnant woman when she carries different sexes, we do not believe. Nor is the one more active in "movements" than the other. But Dr. Frankenhauser, a few years since, in the Monatschrift fur Geburtskunde, stated that the beats of the feetal heart are more frequent in females than males. The mean frequency of twenty-eight female feetuses is 144 in the minute—the lowest figure 138; the mean frequency of twenty-two male feetuses is 120—the lowest figure 112. He thus predicted with great accuracy the sex of the unborn child, and only failed, indeed, when either the pains of labour or the illness of the feetus had deranged the natural action of the heart.

Such, in brief, is about the sum of our knowledge on this interesting subject. We are near enough to a solution, to encourage us to give it further and more earnest study.—Philadelphia Medical and Surgical Reporter.

ON EXTERNAL MANUAL PRESSURE OF THE UTERUS DURING THE SECOND STAGE OF LABOUR.

By JOHN K. SPENDER, M. B. Lond., Bath.

Last July, I attended a lady in her eight confinement, whose chief trouble had always been excessive post partum hæmorrhage. She is a person of diminutive stature, and of choreic tendencies. The pregnant womb at full time has always shown a disposition to anteversion, so that when the patient lies on her side, the fundus uteri tips over, apparently from the mere weight of its contents.

This labour was unusually tedious, owing partly to the too early escape of the liquor amnii. Suddenly the thought struck me, that, if I clasped the uterus by placing the out-stretched hands on the abdomen, and then exerting firm pressure in a backward and downward direction (the nurse making counter pressure on the back), I should help the natural forces a good deal. I did so for an hour during every pain; and the result was, that the labour came rapidly to an end; the placenta was expelled by the final pain which expelled the child; and the afterflooding was almost nil.

The pressure produced benefit in several ways. (a) To a great extent it rectified the position of the uterus, and pro tanto the axis of the fœtal track into the world was made right too. (b) It gave a physical stimulus to the uterine fibres, and increased their expulsive power. (c) It caused a more complete contraction of the uterus after the birth of the (living) child, thereby checking the tendency to hæmorrhage. Other collateral advantages also were secured.

A few days after the event which I have related, I noticed in a recent number of the Medical Times and Gazette that Dr. Barnes speaks in

approving terms of the practice of external manual pressure of the uterus. But, so far as I am aware, the subject is not formally treated of in modern text-books of midwifery.—British Medical Journal.

# PROLAPSUS OF THE URETHRA IN LITTLE GIRLS.

This disease is not so unfrequent as might be supposed, and in an article published on the subject in the "Revue de Thérapeutique," M. Guersant states that he has observed fifteen cases of the affection in little girls between two and twelve years of age.

Eversion of the urethra, like prolapsus of the rectum, occurs only under an enfeebled state of the constitution. When this predisposition is present, bearing-down efforts or paroxysms of cough are sufficient to occasion the displacement of the mucous lining of the urethra. A small roseate tumour then forms at the meatus, with a central orifice, through which a bougie can be passed down into the bladder. This condition may last some time without attracting notice; but it often produces pain and difficulty in voiding urine, irritation of the vulva, a puriform discharge; and it has even been known to induce superficial mortification.

Urethral polypus is the only disease which might be mistaken for procidentia urethræ, but the polypus will be discriminated by the existence of a pedicle.

For many reasons it is desirable to remove the affection, and excision is the most appropriate measure for the purpose.

Chloroform having been exhibited, the part is exposed, and the mucous membrane being secured and gently drawn outward with a loop of thread or a tenaculum, the exuberant fold can be easily cut off with curved scissors. A very small quantity of blood escapes, and the hæmorrhage promptly yields to cold water compresses, or to the local application of diluted sesquichloride of iron. In a case in which the hæmorrhage proved more obstinate, M. Guersant resorted with success to the application over the hypogastric region of a bladder filled with ice.

In most cases the operation presents no difficulty, and produces merely a little pain for a day or two in passing water; cold lotions, and if necessary, superficial cauterization with nitrate of silver, may be required to promote cicatrization.—Journal of Prac. Med. and Surg.

# Canada Medical Journal.

MONTREAL, FEBRUARY, 1868.

On the eleventh day of December last, the City Clerk of Montreal, by public advertisement inserted in the leading English and French newspapers of the city, gave notice that on and after the 1st of January, 1868, section 4 of the By-law concerning burials would be rigidly enforced. The effect of the enforcement of this By-law, which prohibits the keeper of a cemetery from receiving any body for interment unless accompanied by a certificate from the attending physician, would be to give a correctness to the returns of mortality, which are now, as they have been in the past, all but utterly worthless for statistical purposes. In our last number we took notice of this advertisement, and held that the By-law would not afford all the benefits which we thought could be derived from its enforcement, unless the Corporation supplied the physicians of the city with the blank form mentioned in the By-law. We feared that some certificates might be handed in, which would be deficient in some essential details, but we were not prepared to think that the profession would be so careless as to allow two whole weeks to pass, and upwards of one hundred interments to take place, without the presentation of a single certificate. Yet such is the fact, and we must honestly say it is not one which redounds to our credit. We know that it has been objected on the part of some, as troublesome to make out a blank form, but as there could be no doubt but that eventually the city would furnish them, surely it was worth some little trouble to have reliable statistics of mortality, from the first day of the year. In this we have failed, and while we blame the physicians of Montreal a very great deal, still we cannot hold our Health Committee, (who, we believe, suddenly ordered the enforcement of the law) altogether as undeserving of censure. Having given notice of its enforcement, it was their duty to have watched the handing in of the first weekly mortality sheet from both our cemeteries-and if unaccompanied by a certificate for each name recorded upon it, to have informed the keeper of those cemeteries that the law would be rigidly enforced, and that the presentation of the following weeks mortality sheet, similarly deficient, would lead to the penalty being executed against them. This would certainly have had the desired effect, for we know of no By-law which can be more easily enforced. Let the keepers of both cemeteries absolutely refuse interment, unless a certificate signed as directed by the By-law, be given them—and we vouch for it, the certificate will be forthcoming. But surely now that we have drawn attention to the matter, we may expect that the profession will show some little spirit and second the efforts of the Corporation, in a matter which is deserving of their warmest support.

Since the above was written we have made enquiries, and find that the mortality sheet of the Mount Royal Cemetery, for the week ending Saturday, January 25th, has one certificate accompanying it: that from the Roman Catholic Cemetery has not any. It is really too bad that the profession ignores the existence of such an excellent By-law. As the Health Committee have resolved to have the necessary blank forms printed immediately, for the purpose of supplying the profession, we hope soon to see the law in full operation. We need hardly add that any physician who neglects to furnish a certificate when required, after he has been furnished with blank forms, deserves to have the full penalty of \$20 enforced against him.

### THE RELATIVE RANK OF VOLUNTEER SURGEONS.

The following very singular order appears in the Canada Gazette. "Militia General orders: Head Quarters, Ottawa, 17th January, 1867. No. 1. In future all gentlemen who may be, or who may have been appointed to the Civil Staff of Battalions of Volunteers, will be considered to hold relative rank as follows: Surgeon to rank as Captain on appointment; after five years service as Major. Assistant Surgeon to rank as Lieutenant on appointment; after five years service as captain. It is to be distinctly understood, that relative rank confers no military status or command."

We have always thought that the relative rank held by medical officers of the Volunteer Service, was similar to that held by the medical officers of Her Majesty's regular army, and the promulgation of the above order, which establishes a standard distinct and separate in the case of the Volunteer Surgeon, is our first intimation to the contrary. We are not aware of the reasons which have induced the authorities to issue such an order, and for our part we object to it as inexpedient and calculated to damage and dishearten the Medical Volunteer Staff. In Her Majesty's regular army, there are no first appointments to Surgeoncies of regiments; all must have previously served as Assistant Surgeons, but we believe that

no Assistant Surgeon was ever gazetted to a Surgeoncy, and had its relative rank, that of a Major, denied him. In the volunteer service, many are appointed Surgeons, who have not been Assistant Surgeons, and we fancy it is to meet this class of cases, that the order has been issued. If so, we still say the order is most injudicious, for if the Surgeon is worthy of his appointment, he is worthy of holding the rank which is assigned to a similar position in the regular service. Again the order affects Surgeons who have been already appointed, and who by common consent took the rank of Major, immediately upon their appointment, and we fancy that they will not quietly sit by and see their heretofore presumed rank taken from them. If they do, we much mistake their temper and their spirit. But aside from the injudiciousness of the order it is most unjust. Let us explain. In the regular service, after six years' service, the Assistant Surgeon takes rank as Captain, and we believe after six more, his rank of Major, and following this rule in the Volunteer Battalions, medical officers have been assessed for the regimental expenses. Now let us give an actual case. An Assistant Surgeon was appointed in May, 1860, to a Volunteer Regiment, and in May, 1866, completed his six years service, and assumed his rank as Captain. In the October following the Surgeon resigning, the Assistant Surgeon was promoted to the Surgeoncy, and assumed the rank of Major, being assessed on the regimental books, the usual promotion fee. Is it to be presumed that this officer will be compelled to serve five more years before he can rank as Major? It would not be so under similar circumstances in the regular service, and we think the militia authorities will find some difficulty in persuading the profession that there exists any necessity for the departure, which the order above quoted implies, from the rule heretofore adopted, of following the practice which exists in the Medical Department of the army. The Medical Staff of the Volunteer Force is one which requires careful fostering, and we fear the effect of the above order upon it.

Perhaps it may seem as if we were deficient in comprehending the phraseology of military orders, but we must confess to have read over the last paragraph of the order, more than once, and each time been further off comprehending it. We can readily understand a relative rank conferring no military command, but we fail, we honestly confess it, to see why relative rank should not confer military status, equal to the rank held. When the English Volunteers visited Belgium in 1866, those high in command disregarded the Military Status of the Volunteer Surgeons who accompanied the excursionists when the invitation to the festivities were issued, but on their return, such an expression of feeling burst

forth from the Medical Volunteers of England, that those guilty will not soon forget. Medical men are usually not accused of putting themselves forward, but we can but think that Volunteer Surgeons and Assistant Surgeons will be quite right to claim the military status of their rank. Already we have received several letters calling our attention to the matter, and others have appeared in the daily papers. We can state to all who have written us on the subject, that our pen will battle with ail the vigour it is able, against the adoption of such an injudicious and unjust order.

### THE QUESTION SETTLED AT LAST.

Ever since the first inception of the Volunteer Movement in Canada it has been a questio vexata as to whether a Surgeon was entitled to appear mounted on parade. The Militia authorities, we believe, took the ground that the Surgeon had no such right, and a Surgeon of a Volunteer Regiment in Montreal, was a few years ago brought before a Court of Enquiry for appearing mounted on parade. If we are correctly informed the decision of the Court was not very explicit or decided; they admitted his right to go mounted to parade but insisted he should dismount during inspection. The Surgeon, notwithstanding this Court of Enquiry, continued to appear mounted whenever his regiment paraded in public, and we heard frequent threats of again bringing him before a Court. Now, however, the matter is set at rest, an order having been recently issued by His Royal Highness the Duke of Cambridge, the Commander in Chief, directing Medical officers of the Army, who have the relative rank of Field officers, to appear mounted on parade in future. We are glad to notice that the services of the Medical Department are being appreciated.

### ACUPRESSURE.

We make the following extract from a recent letter received by the senior editor from Sir James Y. Simpson, of Edinburgh, the eminent proposer of acupressure for the arrest of hæmorrhage. "Lately, Dr. Pirrie, Professor of Surgery, Aberdeen, wrote me that he has now had fifteen cases of excision of the mammæ, in which he employed acupressure. Ten of these fifteen cases have healed without one single drop of pus. Five of these ten were Hospital cases." This is certainly a most encouraging report. We have employed acupressure in the Montreal General Hospital, in several cases, one of amputation through the condyles of the femur: this was our first experience, and it was with doubt as to the result that we removed the pins on the third day, but no

further trouble followed. So great is our confidence in the use of the pin or needle, as a means of arresting hæmorrhage, that we will in future discard the use of the ligature even in aneurism. We cannot see why acupressure should not supersede the ligature; we have not, so far, had an opportunity of trying, but certainly on the very first occasion we shall put the suggestions of Professor Simpson to the test in this particular, and we feel confident as to the result.

## "THE PACIFIC MEDICAL AND SURGICAL JOURNAL."

We have regularly mailed our Journal to the above address, if not duly received the fault is not ours. With regard to Dr. Wooster's excellent paper on "general rules for diagnosis and treatment of diseases of the heart," copied by us from the Pacific Journal, we can only say, in apology, that we made the necessary corrections in our proof, giving full credit to the Pacific Journal, but the printer omitted to make the correction. It will be noted that Dr. Wooster's paper appeared in our Periscopic Department and not under the head of Original Communications.

VENOUS (AND MARS.)—A Paris correspondent of the New York
Medical Record tells the following amusing story:

"One day lately, the garçon de service, employed in the wards of Dr. Fouquier, appeared with two black eyes, and his face covered with bruises. 'What is the matter with you, my man—inquired M. Fouquier, always kind and polite. 'I have been fighting with M. Bouillaud's infirmier, but he is more done for than I am.' 'You were very wrong. What were you fighting about?' 'Because he insisted that it is always necessary to bleed in typhoid fever?' The gravity of the physician was not proof against this unexpected reply. When it is remembered that M. Bouillaud is the author of the famous system of bleeding in pneumonia twice a day, coup sur coup, and extends his sanguinary propensities to typhoid fever also, the belligerent enthusiasm of his humble subordinates may be easily explained."

SIR WILLIAM FERGUSON lately made quite a formidable operation, namely, the removal, by reason of an osteo-sarcomatous tumour, of the whole scapula, half of the clavicle, and the entire arm. The patient died upon the third day. In January, 1865, Sir William removed a piece of the scapula from a young girl, and, the disease recurring, in November following, the remainder of the scapula, part of the clavicle, and the arm. This patient did well, and was exhibited on the day of the first mentioned operation, Oct. 19, 1867.

## CANADA

# MEDICAL JOURNAL

## ORIGINAL COMMUNICATIONS.

A Few Thoughts Respecting the Treatment of the After-birth. By W. CANNIFF, M.D., M.R.C.S., England.

The function of the placenta is well understood. It is at once a bond of union between the new being within the womb, and the mother; and the organ by which the offspring's blood is aerated and its growth and development sustained. The hour of utero-gestation, at which the placenta begins its duty, may be doubtful; but the moment when it ceases its work is sufficiently certain.

The onset of parturition at once affects the placental circulation; for, as each pain comes and the uterus contracts, there must be a correlative arrest of the flow of blood into the maternal portion of the placenta. The only effect upon the child is such as may be experienced by holding the breath for a certain length of time. As the passage of the child by the natural way into the world progresses, the effect upon the child must be correspondingly increased; not only because of the increasingly intensified and prolonged bearing-down pains, but the necessarily increased contraction of the womb as its contents are expelled, and a diminution of the cavity takes place. At last, when the expulsive power overcomes all obstacles, and the head of the child or any portion of equal dimension is born, there must attend more or less displacement of the placenta in its attachment to the uterine walls. The placenta cannot contract, while the uterus in the whole of its extent does, and this, it is submitted, necessitates a partial or complete separation at this time of the placental organ. The child during this last pain, has been, as during the previous ones, deprived of the vivifying influence of the maternal blood; but does it now. after this pain, by which the head is born, is over, recover the vital stimulus? If the placenta remains attached it might, indeed it would. But what says experience? The writer speaks only for himself. He has noticed invariably that the child,—shortly after the head is born, when there should be, if the placenta remained attached, a return of maternal blood—makes an effort to breathe; there is a gasping. As the chest is confined within the pelvic cavity, the lungs cannot expand; if a long period elapses before another pain completes the birth, the child becomes asphyxiated, and may even die, at least render artificial respiration necessary to bring on the natural. So far, it is supposed, all has been done by the normal powers of nature, although if interference or assistance has been necessary, the subsequent steps will be the same.

When the child is completely expelled, it is submitted that the final expulsive effort of the uterus has entirely detached the placenta, unless there should be abnormal adhesions, and even then it is not of sufficient extent to allow a maternal flow of blood for the child. In other words, it seems most likely that when the head is born there is such a separation of the placenta from the uterus, that the child no longer can derive sustenance from that source, and consequently seeks it in another way, as is evidenced by its gasping; and that when the child is entirely born, there is undoubtedly a complete severance, unless there be abnormal attachment, which will require unusual interference to overcome, yet which cannot afford a channel by which the mother can continue to maintain life in the offspring. The child is born, and henceforth must seek the breath and food of life in another way-through other channels. Such being the case, we can see the utter futility of the accoucheur waiting a moment before severing the funis. The mistake of feeling the cord, to see if there be feetal circulation, is palpable, for although blood may be felt passing from the child to the placenta, it does not from that action receive any benefit-acquire any change. It is obvious then, that the cord may be divided without delay, and, moreover, when the child is asphyxiated, the sooner this is done the better—the greater the chance of resuscitating the child by artificial respiration. The proper course is, not to wait until the child breathes, but to hasten the application of the ligature and division of the funis, that the child may be placed in the most favourable position and circumstances to produce animation.

The child is separated from the placenta and is properly breathing, what remains to be done? Will the medical attendant apply a bandage and wait for a pain to expel the placenta, be the time long or short? Why should he wait? For five years the writer had been accustomed not to wait, but to proceed to assist nature in its removal, in the follow-

ing manner: The time occupied in tying the cord and disposing of the child is generally about the same period as the intervals between the previous pains, and nature is found quite prepared to obey the solicitations of the attendant and expel the after-birth, which in the majority of cases lies within the vagina. Taking hold of the funis with the right hand, the left is placed over the fundus of the uterus, and through the abdominal walls gentle manipulation is made, at the same time a moderate degree of traction is used in the proper direction upon the cord. According to my own experience, the uterus responds to this action, and the placenta comes away; and when such is not the case, it is found that some unnatural adhesions retain it. In all cases where the placenta does not come. I unhesitatingly introduce the hand and remove it. The dilated state of the parts, and the prepared condition of the hand are most favourable for this procedure. But, says one "meddlesome midwifery is bad," and so it is, in so far as nature is thereby embarrassed or hindered. Is it, however, a meddlesome thing to tie the cord after the child is born? Certainly not, nor is it to remove the placenta, which now, a foreign body, only prevents the comfortable settling of the mother, whose jaded frame and excited mind so much require the absolute rest which only comes when all is over. It must be borne in mind that in the great majority of cases the placenta comes away by gentle traction and abdominal manipulation, and when it does not, there exists abnormal adhesions. rendering the introduction of the hand necessary; for it is taken for granted that no one would think of administering ergot to produce pains to expel the after-birth. And if manual interference is necessary, there can be no doubt that the sooner it be made the better. The argument that may be advanced, that it is better to wait until the woman can rest before disturbing her, it is ventured, is unsound. After great agony attending the birth of the child, the removal of the after-birth is but a small thing, unless some time has elapsed so that the stretched and benumbed parts have had time to recover their sensibility.

And, still more, the opinion is advanced, that this procedure secures a more through contraction of the uterus, so as to prevent post partum hemorrhage, and also to prevent the formation of numerous clots, the expulsion of which causes the distressing after-pains.

Reference has not been made to the use of chloroform. It is the writer's custom to always carry with him chloroform when called to attend a case of midwifery, to be given if desired by the patient, and the number desirous of having it is steadily increasing, notwithstanding the influence used against it by a few old practitioners, whose prejudice or something else will not permit them to countenance its use. Of course the amount of

chloroform taken is never sufficient to keep the patient insensible, but to limit the severity of the pain, to take away the acuteness of the sting. Generally, when the last pain comes, a larger quantity is allowed; and at this period the patient is generally clamorous for more; so when the child has been given to the nurse or placed at the foot of the bed, the patient is still under the influence of the anæsthetic agent. And so the steps above recommended, may all be taken ere the mother regain her senses, to know in joy, that her child is born.

Belleville, Ontario, Canada, February, 1868.

On the use of Carbolic Acid in Surgery. By D. S. E. BAIN, F.R.C.S., Edin., Staff Surgeon Major.

In the columns of the Lancet during the past year, Professor Lister, of Glasgow, was the first to bring before the medical world the uses to which carbolic acid could be advantageously applied, and notwithstanding the controversy which has since arisen on this subject, it must be admitted that Mr. Lister has the honour of having brought prominently forward in the columns of the Lancet, the uses to which this acid can be applied externally. From Mr. Lister's favourable description, I was induced to try it in various ways: the first was a case of carbuncle, only remarkable for the method of treatment. It occurred in the ordinary situation. viz., the nape of the neck, free incisions were made, and a pledget of lint saturated with carbolic acid was inserted in the wound, over which a solution of the acid in glycerine (3 j. 3 j), was used as the ordinary dressing. Within 48 hours the slough separated, leaving a clean healthy surface which healed rapidly under the daily application of the acid in glycerine. From the marked success in this instance, I suggested its use in various degress of strength, according to the nature of the affection. Thus in sloughing (syphilitic) ulcers, and in sluggish ill conditioned sores on the extremities, this application has met every requirement in the most perfect manner. To cite other cases, a few weeks back, a serious gun-shot accident occurred to a young girl 16 years of age, carrying away the greater portion of the lower jaw, wounding the tongue and destroying much of the soft parts. The dressing at my suggestion consisted of carbolic acid and glycerine (3 i- 3 i) which was applied by saturating lint and placing it carefully in all the crevises. The homorrhage which was severe, ceased, and the subsequent discharge was healthy without the slightest unpleasant odour, portions of bone came away in the shape of exfoliations in some four weeks after the accident, without the slightest perceptible fetor, and I am happy to add that the girl is now convalescent.

Quebec, 12th February, 1868.

Observations on some of the Inflammatory and Obstructive Diseases of the Cœcum. By Alexander McMaster, M.D., York, Ontario.

In systematic treatises on medicine, it is a matter of surprise in how slight and cursory a manner the diseases of the intestinal canal are disposed of, particularly those of an inflammatory or obstructive character. Physiology teaches us that the whole canal is concerned in the process digestion, and also, that each portion of its anatomical division has its own peculiar function to perform before the completion of that process, the proper performance of which is so essential to a healthy condition of the whole system. Inflammatory disease of the cæcum is frequently confounded with other and essentially different conditions of the intestinal canal. In its function it partakes of the nature of a stomach in the graminivorous and ruminating animals, and it is said to be the viscus in which the last act of digestion takes place, its mucus membrane secreting an alkaline albuminous fluid, while its follicles pour out an unctious oily material with hydro-sulphuretted gases to be eliminated from the economy in the performance of which it becomes, like the lungs or kidney, a depurating organ. When constipation takes place, there is more or less absorption of these excreta, which being carried by the blood, not only contaminates that fluid, but produce a degree of depression of the whole system. I am convinced that it is often the seat of fatal disease without disturbing the function of any other part of the canal, and I also believe that it is often the first in the chain of causation of other disorders, while it manifests comparatively few signs of disease. Inflammatory disorders of the execum are often mistaken for hysteritis, ovaritis, cystitis, and enteritis, &c., they may be classed as acute and chronic, and extending over an indefinite period, either from wrong medical treatment, or errors in diet. They do not seem to be produced by the ordinary causes of inflammation, nor by vicissitudes of the weather, but rather by hardened and impacted feeces, the pips, rinds, and indigestible portions of fruit, acting as mechanical irritants, and oftentimes by various kinds of concretions. The symptoms sometimes begin very mildly and gradually, there being very little febrile excitement when compared with the local pain; the pulse is not small nor much quickened as in other abdominal inflammations; there is less anxiety expressed in the face; pressure over the cocum produces considerable pain; there is also great tension over the whole ileo-cocal region, the pain does not intermit, but gradually extends its area, until the whole abdomen becomes involved. There are no rigours: violent vomiting may set in, especially if drastic purgatives have been persevered in : there is obstinate costiveness. The position is characteristic; the patient lies on the right

side with his body bent and the thigh drawn up. If wrongly treated or neglected, general peritonitis may supervene, and speedily end fatally. In the progress of these diseases adhesions often form either in the interior and surrounding parts; also abscess, sometimes pointing outwards and requiring evacuation, sometimes bursting into other parts of the intestinal canal, the contents being so evacuated per anus, sometimes producing fatal peritonitis. When resolution takes place, it is generally preceded by action of the bowels, subsidence of the pain. tenderness and sickness; about the fifth or eighth day this result can only be hoped for by the most judicious treatment, but when mistaken and treated by large and repeated bleedings or violent purgatives, there is great danger of a fatal termination or a protracted convalescence. The treatment to be pursued in these cases, consists of leaches applied to the cæcal region in numbers proportionate to the severity of the disease, hot fomentations assiduously employed, mild aperients and the free use of opium (in some instances in combination with calomel and ipecac), large bland emenata thrown into the bowels by means of an O'Bierne's tube. Purgative of a drastic or irritating character should be avoided; the diet should be entirely farinacious.

In chronic cases where the action of the bowels has become irregular, and the ejections feetid, (diarrhea alternating with costiveness) associated with colicy pains, hardness and fulness over the region of the execum, with tenderness on pressure, reliance is to be placed in blisters, iodine and linaments with united aperients, also a strict regard to dietic rules.

In cases of simple obstruction from over-distention or impracted feeces, relief is to be sought in the employment of large bland enemata, mild aperients and sedatives, such as hyosciamus and belladonna, dashing cold water over the surface of the abdomen, electricity, tobacco enemata, &c. Should these means fail, operative surgery still comes to our aid.

## REVIEWS AND NOTICES OF BOOKS,

Annual abstract of Therapeutics, Materia Medica Pharmacy, and Toxicology, for 1867, followed by an original memoir on Gout, Gravel, and Urinary Calculi. By A. BOUCHARDAT, Professor of Hygiene to the Faculty of Medicine, Paris, translated and edited by M. J. De Rosset, M. D., adjunct to the Professor of Chemistry, University of Maryland. Philadelphia: Lindsay and Blackiston, 1868.

Montreal: Dawson Brothers.

This annual abstract of the more valuable discoveries in the sciences

named, has been issued for some years back, and on the Continent of Europe has acquired a very high reputation. We believe this is the first translation which has been published on the American Continent, and so far as we have been enabled to examine the work, the translator has done his task well, adhering as far as practicable to the text. The selections have been made mainly with a view to the useful information they convey, mere theoretical abstractions we are glad to notice being omitted. In the preface the Editor says: "the work is addressed to the requirements of physicians whose engagements do not permit of their searching over the immense field from which these facts are gathered; to practitioners in the country as conveying the results of the active labours of the "toilers" in our profession, and to medical men generally, in the amount of original information from sources hitherto unavaible." We have much pleasure in recommending the manual to the notice of our subscribers in the country, convinced as we are that many valuable hints of a thoroughly practical character may be gathered from its pages. The translator has added a few foot notes, which give to it an additional value.

### PERISCOPIC DEPARTMENT.

## Surgery.

COMPOUND FRACTURE OF THE SKULL, WITH LOSS OF A PORTION OF THE SUBSTANCE OF THE BRAIN.

By GEORGE CROKER, M. D., F. R. C. S. I.

James Gipson, et. 19, carter, in the employment of the Marquis of Downshire, of strong, healthy appearance, the youngest but one of eleven brothers, all of whom are living.

July 9th, while driving a horse and empty cart, in which he was standing, the horse became restive, and kicked in the forepart of the cart, getting his hind legs right in; Gipson having loss his balance, fell with his head towards the horse's heels. After a short distance the horse fell; just at this time some men came to Gipson's assistance, and found him lying with his head towards the heels of the horse, which at this time was struggling. They at once lifted him out, and laid him on the ground. Ten minutes elapsed before I saw him. He was then rolling about, complaining bitterly of pain in his right shoulder and arm, and not at all of the head. On examining the arm there was no apparent cause for all this pain. One of the men who assisted in lifting him had several pieces of

medullary substance on his coat sleeve, and also in the cart where his head lay there was more. The hair being cut, and part of it shaved, two small wounds were to be seen on the upper and fore part of the right side of the head; they were between three and four inches apart, and corresponded with the cocks on the horse's shoe.

Having introduced a prope into the front one, it passed easily down for more than two inches, giving evidence at the bottom of a depressed fracture.

The two wounds were thrown into one by a blunt pointed bistoury. The scalp had been separated from the skull for some distance round. The flaps were easily drawn to either side. The blood being cleared away, large pieces of the skull were seen imbedded deep into the substance of the brain. On rising one piece which was altogether unattached, there at once came up a large gush of blood. This, after a little time, subsided, and, when cleared away, the brain and its membranes, &c., could be seen very extensively lacerated and deep. The bone which was removed is two and half inches long, by inch and half, at the broad side, and at the narrow end nearly an inch. The other depressed bones were denuded of the periosteum for about two square inches, but adherent to the scalp over the right temple. They were raised up by an elevator, and placed in as close apposition as it was possible; nevertheless, their tendency was to fall down. It may be worth mentioning that the brain appeared not to fill the cavity of the skull, as when all was cleared off, the handle of a scalpel could be passed easily between it and the cranium, round the part that was visible.

The wound and surrounding parts having now been cleaned, it was dressed with a pledget of lint and cold water. The man was then put on a stretcher and carried home, a distance of nearly two miles.

His after treatment was keeping him in a dark room, and putting him as quickly as possible under the influence of mercury, by small doses of calomel and James's powder every two hours, applying large quantities of ice to the head, occasionally the use of a turpentine enema.

He had no bad symptoms for some days, the circulation very little disturbed. About the sixth day he became restless and wandering; this lasted for three days, when he began to complain of severe pain in the right shoulder and arm, which became partially paralysed; this continued for four days, and then the pupils became dilated, and his sight almost gone, particularly in the right eye. Small portions of medullary matter were now then thrown up from the wound.

From the twentieth day after the accident he began gradually to improve. All bad symptoms appeared to have left him, and he was able to

sit up a little in a fortnight after. This state of things went on every day; he gained strength quickly, and was able to resume his work the tenth week, suffering little or no inconvenience.

The wound cicatrized perfectly over, leaving a deep furrow about five inches long and two wide along the side of his head, the deepest part being about two-thirds of an inch.

In this case, it is remarkable to what extent the brain, its membranes, and vessels, can ever recover from the effects of such an injury, and how nature, with a little assistance, can accommodate all those parts to again work in unison, and repair such a breach without any impairment to mind or body.—Medical Press and Circular.

#### HOSPITAL NOTES AND GLEANINGS.

TREATMENT OF WHITLOW IN THE LONDON HOSPITALS. MIDDLE-SEX HOSPITAL.—Amongst the out-patients of this hospital Mr. Lawson has remarked that the frequency of whitlow varies considerably. At one period of the year the disease may be of frequent occurrence, whilst at another it may be comparatively rare. In speaking of whitlow, it is the deep or severe form to which he refers: the treatment of a superficial whitlow is self-evident. The causes which produce whitlow may be local or constitutional; but the majority of cases are due to the latter. A slight injury, such as a scratch or a prick with a rusty nail, may have been the immediate excitant; but had the health of the patient been good at the time of the accident, the probability is that no severe after effects would have followed. At certain times when boils are prevalent, and the tendency of disease is to assume a low type, whitlows are common in the out-patient rooms of the hospitals. They should always be regarded as evidences of low power, and in considering the treatment of them this fact should be borne in mind.

When a whitlow threatens, the patient should, if possible, strike work; and a purgative should be given to clear the bowels of all irritating matter, as a preliminary to the tonic treatment which is to follow. The mineral acids with bark nearly always do good; or their use may be preceded by diffusible stimulants, such as ammonia and chloric ether. Depressants are uncalled for, and will probably do harm. Warmth should be applied to the finger by linseed-meal poultices, changed two or three times a day; and, with each change of the poultice, the part should be soaked for at least a quarter of an hour in hot water. The warmth is grateful to the patient, and generally does good.

The most important points, however, in the treatment of whitlow are:

1st, to ascertain when pus has been formed; and, 2dly, to give vent to it by a free incision.

The sense of fluctuation, which is usually one of the prominent symptoms of the presence of pus, cannot be appreciated when the matter is in the extremity of the finger or thumb. The natural elasticity of the par is so deceptive that it may be easily mistaken for fluctuation. The only reliable guides for determining the existence of pus in cases of whitlow are tension and pain. The cushion of the finger or thumb becomes hot and swollen, more or less tense, and exquisitely painful. The slightest touch aggravates the pain, which is of a throbbing character, and so severe as to destroy sleep. Such symptoms are diagnostic of pus, and a free opening should be at once made to give vent to it. The incision should be in the mesial line of the palmar surface of the finger or thumb, and of a sufficient length and depth to give a free escape to the pus. A warm linseed-meal poultice should be then applied, and the fomentations with hot water repeated from time to time.

Much might be said about the neglected whitlows which are often met with amongst the out-patients. The suppuration has been allowed to go on undisturbed: and no exit for the pus having been made, it either works its way to the surface by progressive ulceration, or it burrows beneath the palmar surface of the finger and thumb, in some instances extending into the palm of the hand. Even when the pus makes its way to the surface, there is always considerable destruction of overlying tissues, and very frequently necrosis of the last phalanx. In treating such cases it is advisable to save the nail, and as much as possible of the end of the finger or thumbs. By waiting patiently, the necrosed bone will become loosened from its attachments, and it may generally in the end be lifted away with a pair of forceps, and a very useful finger will be the result. Amputation should not be performed simply because the last phalanx is necrosed. can always be resorted to after the other plan of treatment has been tried There are, however, cases of neglected whitlow in which amputation of the finger or thumb is the only treatment which can be rightly pursued; but these must be regarded as rather exceptional.

WESTMINSTER HOSPITAL.—Mr. Power holds that there is no sufficient evidence of there being but two distinct forms of whitlow — the superficial and the deep-seated (onychia maligna); but that there are many degrees of inflammation, the severity depending essentially on the state of the patient's general health, and partly also on the cause and on the condition of the part itself. The disease commonly appears as a consequence of some slight injury, as a punctured wound; or results from disordered bowels, insufficient or unwholesome diet, night watching, or other depressing con-

dition. If the patient be otherwise healthy, and the skin, as in young persons, be thin and delicate, the affection, which is to be regarded merely as a boil, requires but little treatment. The bowels should be opened with a dose of compound jalap powder, a black draught, or castor oil. The hand and arm should be kept raised in a sling, and the finger, and even the hand, enveloped in a poultice of linseed-meal with a view of softening the skin, of allowing swelling to take place more readily, and of facilitating the bursting of the little abscess. When this has occurred, the symptoms immediately remit, and quick recovery follows. Incisions are not needed in such cases; on the contrary, they do harm. If made, a drop of bloody pus exudes, and a reddish, vascular, fungous growth springs up, the pain recommences, and what would otherwise have been superficial and slight becomes deep-seated and severe.

When the formation of matter occurs under the nail or beneath the horny skin of the finger of the artisan, a different line of treatment must be adopted. Here the pain is very severe; and the matter, when formed, must creep and burrow beneath the skin or nail, and may easily, by the pressure it exerts, cause the ungual phalanx to die. General treatment is of little service; but the skin should be softened by the application of a poultice for a few hours, and a free incision be made. Water-dressing may then be applied; and if any recurrence of the inflammatory symptoms is observed, the whole of the finger should be well rubbed over with the solid nitrate of silver.

Finally, in very unhealthy subjects, when the disease has lasted for some time; when the subcutaneous connective tissue is infiltrated with matter, the skin raised in vesicasions, the finger, hand, and arm swollen, with red lines extending up the forearm, indicating the position of the lymphatici, and the gland at the elbow or those of the axilla swollen and painful, the use of the knife is indispensable, and the incision should be free and deep. If the bone is felt bare and necrosed, the whole phalanx should be removed at once; if not, it may be left, though it will generally necrose subsequently, when the inflammation has been so severe. The sheaths of the tendons should not be opened too far. They may recover their functions.

As regards general treatment, opium and sedatives are of little service. Common sense will dictate whether abstinence should be enjoined, or wine, full diet, and tonics administered. Persistent fistulous orifices indicate the existence of a portion of dead bone, which must be cut down upon and removed with forceps, or, if necessary, with cutting pliers.

St. Bartholomew's Hospital.—At this hospital a large number of ill-nourished young women, mostly sempstresses or engaged in domes

tic service, apply for relief, suffering from the cutaneous or subcutaneous forms of whitlow. These varieties of the disease, where the inflammation begins in the neighbourhood of the nail, and limits itself to the last joint of the finger, Mr. T. Smith treats by the administration of tonics, and locally by poultices or water-dressing, leaving the patient to decide whether the pus shall find its own way to the surface, or an earlier relief from pain shall be procured by incision. He believes that in any case where the matter is near enough to the surface to be seen through the skin, no other harm than some additional pain is caused by allowing the abscess to open spontaneously. He is in the habit, however, of opening early by incision the deeply-seated subcutaneous whitlows that occur over the last phalanx, in order to diminish the risk of necrosis. Should necrosis occur, the bone, when thoroughly separate from the soft parts, is drawn out through some already existing sinus, or through an incision made just beneath and parallel to the free edge of the nail. Tendinous whitlow occurring on the first or second phalanges, Mr Smith treats locally by early and free median incisions on one or both aspects of the finger. In any form of whitlow, when once there is a free exit for the pus, Mr Smith recommends at the first the temporary and then the permanent discontinuance of the poultice, as tending in this stage to prolong and increase suppuration. - Lancet.

OPERATION OF SPLENOTOMY (REMOVAL OF A SPLENIC CYST AND COMPLETE EXTIRPATION OF THE HYPERTROPHIED SPLEEN): RECOVERY.

PERFORMED BY DR. PEAN, SURGEON TO THE HOSPITAL. BY BALTHAZAR W. FOSTER, M. D., M. R. C. P., Translated from the L'Union Médicale, Nov. 26th, 1867. PHYSICIAN TO THE QUEEN'S HOSPITAL, BIRMINGHAM.

MLLE. ADELE CERCILY, boarder at the orphanage of Saint Mandé, aged twenty years, of a robust constitution and lymphatic temperament, had always enjoyed good health until the appearance of the first symptoms of the present malady, which manifested themselves some two years ago, by an increase in the size of the hypogastric region, accompanied by acute pain. The symptoms increased gradually till about two months before the operation, when her sufferings became so violent that they compelled her to cry out, and threw her into a profound state of melancholy and depression. The pains, moreover, were not thoroughly intermitting, were seated for the most part in the right illiac fossa, and resisted all treatment.

The patient came to consult me on August 20th last, her sufferings had become so unsupportable, that she was prepared to undergo any treatment.

The following are the results of the examination made at that date:—
General health greatly debilitated, advanced anæmia, great disorder of digestive functions, dysmenorrhæa, slight embarrassment of respiration. The patient complained of febrile attacks, and diffused neuralgic pain. She was in a state of exhaustion from her suffering; there was no ædema, yet a little embonpoint.

The abdomen was increased in size, and presented a considerable prominence in the hypogastic region, while there was scarcely any fulness in the hypochondria and lumbar regions. The prominence was nodulated on its surface, but, in other respects, was similar by position, extent, and form, to the gravid uterus in the last months of gestation. The circumference of the abdomen measured 1 metre 10 centi-metres.

Palpation produced a little pain in places; the consistence of the tumour varied; fluctuation was very distinct in the median line, and on the right side. At the surface of certain elevations, particularly on the left side, the consistence was firmer, solid, and recalled that of a fibroma.

On percussion, there was absolute dulness all over the surface of tumour, and sensation of fluid over a great part of its extent. Resonance all round it, in the epigastric, hypogastric, and especially in the lumbar regions. The tumour appeared clearly defined at its circumference, and in particular, at the superior margin. It was completely immoveable.

Digital examination found the hymen entire: The uterus, of normal size, appeared wedged in the thickness of the tumour, which rendered it immoveable, and formed, anteriorly and posteriorly, a projection, which depressed the viginal walls. The finger easily detected the existence of fluid on pressure and percussion being made on the hypogastrium. The greater solidity of the tumour on the left side and below, led to the opinion that it was developed in the left ovary, and the pain caused on this side by vaginal pressure, excited a fear that numerous adhesions existed.

On September 6th, at the Convent of the Augustine Sister, in the Rue de la Santé, I performed the operation, assisted by Drs. Ordonez, G. Désarènes, Gaudin, Morpain, Gossé, and M. Magdelain, my clinical assistant.

The patient resisted the action of chloroform, and it produced vomiting several times during the operation, which was a troublesome complication. An incision was made in the median line from the umbilicus to the pubis. The abdominal wall, somewhat thick, was divided in successive layers. Four ligatures had to be applied to the divided vessels. The peritoneum was divided on a director, and no fluid escaped from its cavity. The edges of the incision having been separated, the anterior

surface of the tumour was exposed, in close contact with the abdominal wall, and covered over its entire extent by omentum, which it was impossible to separate on account of adhesions. I resolved to puncture the cyst through the omentum with a large trochar. The puncture gave exit to three litres of thick, viscid, brownish-vellow fluid. The tumour having been thus diminished in size, I was able to introduce my hand into the peritoneal cavity, and carrying it downwards, I detached the omentum from the pelvis and the tumour. Traction separated the adhesions, which gave rise to no hæmorrhage requiring the application of ligatures. Next I searched in vain in the direction of the ovary to discover the situation of the pedicle or place of origin of the cyst, which, now that it was freed from the omentum which had covered it, presented an appearance very similar to uterine tissue. I was able to satisfy myself not only that there was no pedicle, but also that the tumour was completely independent at its inferior surface of the organs contained in the pelvis. Knowing that cysts having a very close analogy with those which arise in the ovary may be developed in the mesentery, or even in the parenchyma of the kidney, I directed my attention to those parts, but the result of my examination was completely negative. The impossibility of drawing the tumour outwards in order to carry the exploration further, necessitated the extension of the incision. I therefore prolonged it towards the left to the extent of four finger-breadths above the umbilicus: The portion of the cyst forming the pouch evacuated by the puncture could now be drawn into the superior angle of the wound. As it still contained fluid, in order to empty it completely, and to facilitate the extraction, the thinnest part of the wall of this pouch was exercised. I could now draw the cyst outwards.

We were now struck by the aspect of the cyst, as regards its unusual colour, the character of the tissue forming its walls, especially in the thickest portions. But soon doubt was impossible. The search for the point of origin of the cyst conducted the hand to the diaphragmatic hollow of the left hypochondrium, and permitted me to circumscribe the fleshy mass constituting the superior portion of the tumour. Everything proved that it was the spleen which was implicated, and that a cyst situated anteriorly and inferiorly had been developed in the hypertrophied organ, and had burrowed in its substance to a considerable distance.

The cyst was unilocular, and the nodules, as well as the non-uniform resistance of different parts of its surface, remarked on examination, were due to the varying thickness of its walls, which varied from some millimetres to four or five centimetres in thickness.

The thickened portions were situated on the inferior part of the cyst

accessible to the touch, and also on the lateral surface, especially that occupying the left flank.

The surface of the tumour was furrowed by vessels, and marked posteriorly by a large venous trunk of 1½ centimetres in diameter. In spite of the extent of the incision the immediate extraction of the whole tumour was rendered impossible by its situation, and I determined, therefore, to remove it in several pieces. Bearing in mind the disposition of the arterial system of the spleen, and how it is divided into tracts independent of each other, we proceeded to ligature in succession, the several branches of the splenic artery, so as to circumscribe and isolate that part of the spleen containing the cyst. The large vein which extended on the posterior surface having been first tied as near as possible to its junction with the splenic vein, the inferior part of the tumour was cut off, and, as we had hoped, no hæmorrhage followed the section. The superior part of the tumour, consisting of about one-third of the whole mass, had now become accessible. Some intestinal and omental adhesions were detached and gave rise to no homorrhage, which compression of the vessels did not arrest. If the structure of the spleen had undergone no degeneration whatever, but had been perfectly healthy, it would have been impossible to preserve the remaining portion of the organ. For the nature of the tissue rendered compression by a clamp impossible, and besides the clamp could not be drawn out, nor maintained in the superior angle of the wound, because the mass which would serve as its base was situated too deeply in the sub-diaphragmatic hollow of the hypochondrium. Moreover, the extent of the cut surface of the spleen was too extensive to strangulate.

The extraction of the last portion of the spleen was proceeded with as follows:—

First of all, four metallic ligatures were carefully placed on the gastrosplenic omentum, as near the spleen as possible, in the short space which separates it from the tail of the pancreas and the bulging end of the stomach. According to all probability, these ligatures would include all the vessels and remove all risk of hæmorrhage. However, in order to guard ourselves still better against the immediate danger, the gravity of which we had every reason to fear, we proceeded to extirpate the remaining portions by their successive destruction by the the actual cautery, after having compressed them in a special clamp made with the object of obtaining by compression of the tissues, linear eschars. These successive cauterizations reached the extreme limits of the spleen below the ligatures so thoroughly that there did not remain a vestige of the splenic tissue. The four metallic sutures were next cut close and left in the cavity of

the abdomen. The patient had not lost 100 grammes of blood by the operation. During the examination of the cyst no portion of the fluid escaped into the abdomen. Nevertheless, I neglected no precaution necessary in such a case, but, after having cleaned the coils of intestine, I sponged out the peritoneal cavity several times. I then closed the wound, and in order to obtain complete occlusion, I placed nine metallic ligatures on the abdominal parietes, at a good distance from the edges of incision, and including the parietal peritoneum. Five twisted sutures were placed on the points which opened between the ligatures.

The operation, thus terminated, lasted a little more than two hours. It had been performed without any remarkable loss of blood, with the exception of that contained in considerable quantity in the tissue of the tumour. During the whole of the operation the patient was kept in a state of perfect insensibility. The chloroformization was so complete that it required nearly half an hour to restore her from her profound artificial sleep. During the day and night following the operation, there was no fever; the pulse was 80, the respiration was again easy; the patient complained only of malaise, and had occasionally vomiting, due to the action of the chloroform. She took a little cold broth, and some stimulating drinks.

The next day vomiting occurred on two occasions, and excited a little pain in the left hypochondrium; the stomach was not at all painful on pressure, and there was no sign of meteorism: The pulse was normal,

90.

On the third day the vomiting ceased; the patient recovered her cheerfulness; the improvement, indeed, was so marked that she could sit up and turn in her bed without perceiving the least pain. The abdomen was soft, and not tender on pressure.

The margins of the wound were perfectly united, and the pins of the twisted sutures were withdrawn. Broth and porridge.

On the 5th day all the metallic sutures were withdrawn, and replaced by a dry colodion suture: At this time the general health of the patient was as satisfactory as if she had undergone no operation. There was no fever, and no pain; the digestive functions were so well performed that solid food was allowed.

From the 8th day, the patient could leave her bed, recline on a long easy chair, without producing any relapse. The cicatrization of the wound was solid and complete in all its extent. At this date the catamenia, which had hitherto been regular, but scanty, and had ceased at the last period, only three days before the operation, re-appeared in great abundance, and of a much darker colour than natural. The flow lasted

three days, but caused only some slight pain on the right hypogastric region. This anticipatory appearance of the menstrual flow frequently occurs after ovariotomy, and, for my own part, I have often observed it, and always under such conditions, that I consider it a most favourable symptom.

On the 10th day it was impossible to prevent the patient from going out. She descended and mounted alone the two flights of stairs which led to her chamber, after having spent a few minutes sitting in the garden, which was about 100 metres from the body of the building in which she lived. She walked as well as possible: The next day she had gone into the entrance court of the convent, when she was extremely frightened by the sight of a runaway horse. This young girl, besides being highly nervous, was so easily affected, that she fainted, and, in spite of the care with which she was surrounded, she was seized with nervous tremors, which lasted three hours. She afterwards had delirium, and some ataxic symptoms.

From this time appetite and sleep deserted her; the pulse varied from 100 to 120 per minute. Violent pains occurred in the right orbit, and brought on a vivid injection of the conjunctiva and lachrymation. This condition lasted some days, and produced moral and physical depression so great as to inspire much anxiety. Nevertheless, thanks to the great care which surrounded her, all the symptoms successively disappeared. The orbital pain and conjunctival injection were determined by an attack of epistaxis; but these local conditions recurred again three different times from week to week, each time, however, the crisis declared itself by epistaxis.

From the fifteenth day the patient, who had been obliged to take to her bed, could again quit it, and return to the use of solid food. She was allowed to go out, and afterwards she went down to the court-yard and the gardens, where she spent the greatest part of her days. During this time the state of her health left nothing to be desired, as, indeed, several distinguished physicians who visited her could testify, more especially Drs. Belin, Blanchard, Galligo of Florence, Kæberlé of Strasbourg, and my illustrious and revered master, M. Nélaton, to whose wise counsels I owe the success I have obtained in the practice of ovariotomy.

However, not to omit anything, I must mention some circumstances which occurred during her convalescence. Thus, during the third and fourth weeks, at the same time that the orbital pains and the epistaxis appeared, the stomach was affected with violent neuralgic pains, which disappeared immediately on the administration of sulphate of quina. Besides this, the menses, which had not returned at the fifth week, were

replaced by very sharp uterine pains, which some laudanum injection, quickly removed: Finally, during the sixth week an adhesive phlebitis of the internal saphena made its appearance, accompanied by edemas which soon ceased to be painful under some topical treatment.

The convalescence was, however, only somewhat impeded by these symptoms, which left after them no permanent lesion. The menses returned for the second time on the sixty-fifth day after the operation. The respiration remained perfectly easy. The patient affirmed that she was able to walk quickly without inconvenience, which was formerly impossible. Lastly, when she was presented to the Academy of Medicine, M. Barth auscultated the jugulars, and could discover no bruit de souffle, a circumstance extremely rare, in the case of a young girl of her age dwelling in Paris.

Examination of the Tumour.—The tumour was examined immediately after the operation; it was of the colour and consistence of hypertrophied spleen. The mass first removed constituted the cyst-walls, and formed about two-thirds of the morbid mass; it weighed 1140 grammes. The walls of the cyst were of variable thickness; at certain points they were thin and reduced to fibrous membrane, in other places, on the contrary, they were two or three finger-breadths in thickness, and were composed of a reddish soft structure, of an appearance similar to that of the spleen. The structure of this tissue was examined by Dr. Ordonez. This able observer recognized, under the microscope: -1. A great number of unaltered blood-corpuscles. 2. A very large quantity of the glomeruli of Malpighi, hypertrophied to such a degree that it was easy to isolate them by the aid of a lens. 3. At certain points where the substance was much thinned, these elements were seen to disappear successively, and to give place to a very close net-work of fibrous tissue, which in spots alone formed the cyst-wall. The wall itself was traversed on the exterior by a great number of blood-vessels of all sizes. The interior of the cavity was smooth and covered in places by hard patches composed of carbonates and phosphates of lime and magnesia. The fluid contents did not differ materially from those found in some ovarian cysts. The fluid was thick, of a brownish yellow colour, and contained a large proportion of albumen, white corpuscles in various degrees of degeneration, and lastly some calcareous granules.

## Medicine.

CLINICAL LECTURE A CASE OF FRONTO-TEMPORAL NEURALGIA

ATTENDED WITH CEREBRAL DISORDER.

By C. Hanfield Jones, M. B. Cantab, F. R. S., Physician to St Mary's Hospital.

M. A. C., ÆT. 25 years, single, admitted October 8th, 1867. On admission, the chief feature of her condition was stupor or semi-coma. She could be induced, with some difficulty, to answer questions, but it was slowly and reluctantly, and not by any means always rationally or coherently. We understood from her mother, I believe, that about ten years ago she had a fall, and hurt her head, and since then at intervals she had had violent pains in her head, with sickness. During the last few days she had been delirious or wandering. Face pale, tongue coated, pulse 84, soft and weak; urine slightly acid, not albuminous; deposits phosphates when boiled, and lithates when treated with nitric acid. No spots on abdomen. Pupils rather large, about equal. Left lower eyelid is congested; left temple seems rather swollen.

She was ordered two morphia dressed blisters, one to the forehead, the other to the left temple, and extracti cannabis indicæ gr. ½ ter die; sherry 4 ounces.

I may introduce here the account of her previous history, which was kindly furnished me by Dr. Bastin, although I did not receive it till about the time of the patients discharge from the hospital. "M. A. C. came to live with us eight months ago; was then very anæmic and delicate looking, and continued so all the time. She had two attacks while in our service, in addition to the illness for which she entered the hospital. The first commenced soon after she came, and lasted nearly a week, the predominant symtoms being intense pain in the left frontal region, with loss of appetite, but no feverishness or impairment of mental faculties. The recovery was pretty sudden. About three months afterwards she had another attack, which was rather severe but quite of the same character. She seemed to get much relief on this occasion from potas. iodid, gr. x. doses, and after regaining her usual state of health she took perchloride of iron in a bitter infusion for some weeks. During all this time the catamenia had been regular. No headache was complained of to Dr. Bastian in the interval between this attack and the one for which she was admitted into hospital, though her fellow-servants say that she did suffer from it at times. The third attack commenced on October 3rd, in the usual way, with intense pain in the left frontal region, loss of appetite, cool skin, furred tongue, but rather quick pulse. Two days later her appetite became much worse, and she became slightly incoherent for the first time. Only some wine and beef-tea were taken on this and the following days. The bowels had been well opened by medicine, and I again gave her the iodide of potassium, with an occassional dose of morphia. The left cyclid about this time became red, and slightly swollen, and there was increased lacrymal secretion. The next day she was decidedly more incoherent and rambling in answers to questions, though she seemed to suffer less from pain. Both pupils were dilated, and almost insensible to light, and continued so.

"On October 7th she was in a dull, almost semi-comatose condition: made no particular complaint of pain, but was quite incoherent in conversation.

12th.—Some slow but gradual improvement has taken place. Zinci valerianatis gr. ij. + extr cannabis indicæ gr. ½ in pil. ter die.

14th.—Is very much better; looks brighter; eyes more lively. Says she cannot tell persons' names, though she knows them. At least this is what I understand her to say. Aspect tranquil. Broth diet.

16th,-Doing well. Sherry 6 oz.

22.—Improves slowly. Her appetite is poor in spite of nitric acid, strychnia, and cascarilla. Says she has now no pain in head at all. Mistakes pronouns frequently—uses he for she, and vice versa.

26th. —Is still very pale and feeble, mopy, and inapt for exertion. Ferri et quinæ citratis, gr. vij. + tr. nucis vomicæ, x. + aq., \( \frac{7}{3} \) i. \( \text{ter die}, \) omitt. pil.; pt. c. oleo morrh. (ordered eight or ten days before.

Nov. 4th.—Is much better; lips of better colour; is more cheerful and rational in manner. Discharged.

The condition of this patient on admission could not be regarded without anxiety. Severe pain in the head, with a considerable amount of stupor and incoherence, recent vomiting, and a previous history of an injury to the head, with subsequent paroxysms of severe pain, were symptoms which could not but excite apprehension. The left frontal and temporal regions, which were the seat of the pain, were somewhat swollen, and the lids of the left eye redder than natural. I confess my first impression was that there existed some (possibly rheumatic) inflammation of the perioranium, bone, and dura mater, and that this was the cause of the pain and other symptoms. At this time I had not the assistance of the detailed report of her previous condition, which Dr. Bastian kindly furnished me with afterwards. On considering, however, that there was no unequivocal symptom of cerebral mischief, no paralysis of the limbs, inequality of the pupils, irregularity, or slowness of the pulse, no convulsion or fever, and observing the manifest anæmia, I thought it not im-

probable that the cerebral disorder was but an effect and extension of the pain, regarding the latter as a neuralgia. In a previous case, I had seen violent pain in the forehead, of apparently rheumatic character, at first complicated with delirium, and subsequently completely absorbed in it (so to speak) when it became more intense. Severe retching was also present. The patient was a strong made man, quite temperate. He died in collapse, and the autopsy the brain was found pale and shrunken and the heart very flabby. Although wild delirium and stupor are very different symptoms in their outward show, there is no doubt in my mind that the state of the brain giving rise to them is, at least, as far as our means of observation can inform us, very similiar, and I am confident that could we have looked within the cranium of our living patient, we should have seen no hyperæmia, but the reverse. Taking thus this view, that the pain in the forehead was neuralgic, and that the brain was suffering sympathetically, the indication was to lull pain or homologous disorder, and recreate nerve power. The progress to recovery was steady but not rapid; her memory continued to be feeble, her mental actions slow and languid, and her general nervous energy considerably below par. Under the continued administration of tonics, she improved very decidedly, and before she was discharged, the nature of the disorder was beyond all doubt. It had, in fact, resolved itself into an ordinary case of anæmia and debility. The swelling of the left side of the forehead and temple, and the redness of the left lids, was no doubt dependent on paresis of the vasomotor nerves of the arteries of these districts. has been well recognized by Dr. Anstie, who has seen neuralgia of the face, in several instances, give rise to a condition much resembling erysipelas. Sir Thos. Watson also states in his lectures, that severe neuralgia will give rise " to a moderate degree of inflammation of the part; which become tender to the touch, manifestly vascular, and even swollen a little." It is important that you should remember the possibility of such hyperæmia being associated with neuralgia, as, otherwise, you might be led into the error of regarding the pain as dependent on inflammation. The dilation and insensibility of the pupils, which Dr. Bastian observed, no doubt depended on the centres of the third pair being rendered paretic, just as the hemispheres were. This case may be instructively compared with those related by M. Notta, Marechal de Calvi, and d'Hurtebise, in which neuralgia of some of the branches of the fifth pair produced paralysis of the third or sixth nerves. Let me remind you, also, of a case of sciatica under my care last year, in which there was complete motor paralysis of the affected limb, and partial of the detrusor urinæ. In these instances the disorder of a sensory nerve and its centre, extended to and involved certain adjacent motor centres. In the patient whose case we are considering, the hemispheres succumbed, being probably of weaker constitution than in most persons.

I commend this history to your attentive consideration, for I am sure you will meet in future days with similar instances, and I think the views I have expounded to you of the pathology of these forms of nerve disorder, may prove of real service in enabling you to judge correctly and treat satisfactorily, conditions that would otherwise be very embarassing. In conclusion, I will put into the form of direct precept the points which I wish especially to emphasize.—1st Do not be too ready to take refuge in the conclusion that there is "congestion and effusion" whenever you have to deal with cases of threatening head affections. Let the conception of paresis of nervous structure be quite as familiar to your minds as those of hyperæmia, or of structural lesion.

2nd. Remark the tendency which disorder of a nerve has to extend to, and to involve nervous centres, even those of the highest order, as the intellectual. In the two first attacks the intellectual centres remained free, in the third they gave way. I believe that two things have influence in determining the situation of the secondary affection—viz., proximity and debility. The nearer centres are, cateris paribus, most likely to suffer, but if they happen to be notably stronger than more remote ones, the latter give way. There is one case on record where diseased teeth gave rise to paraplegia.

3rd. See in the quality of the brain disorder in our patient a manifest demonstration of the real nature of neuralgia. Her brain was evidently partially paralysed, and her frontal and temporal nerves were, I cannot doubt, in a like condition.

4th. Remember that, as this case shows, mere neuralgia may lead to more serious disorder. It is bad enough to be tortured with pain, but any amount of cerebral disturbance is a much graver thing. To prevent such an evil it is surely well worth a patient's while to adopt a suitable mode of life, and to perserve in taking suitable medicines, and this you ought to be able to convince them of. A country life, and the use of citrate of iron and quinine, till all anæmia and neuralgia are fairly got rid of, must be advised to our patient.—Medical News and Circular.

### HYSTERIA IN THE MALE,

Followed by, and complicated with, cerebral congestion. By J. G. Thornley, M. D., L. R. C. S. Edin.

On the first of October, 1867, I was called to see J. W., who was stated to be very ill. On arriving at the residence of my patient, I found

him in bed, with flushed face, stertorous breathing, and a tremulous movement or quiver running through both the upper and lower extremities; occasionally the tremulous movements assumed the character of a slight convulsion, and then terminated for a period of from five to fifteen minutes, when the tremulous movements again commenced, and terminated as before. The patient, during all this time, did not speak, but lay in an apparently semi-conscious state. That peculiar trembling of the eyelid which is so strongly diagnostic of hysteria, and which has been especially pointed out by Dr. Guy, was well marked, and was present during almost the whole period of the attack. The pulse was very variable, ranging from 72 to 100 beats per minute. On shaking the patient, and speaking in an authoritative tone of voice, he would open his eyes for a moment, answer in a stupid manner, and again relapse into his former state of apathy. After remaining in the above state for about forty-eight hours, and there being no signs of improvement, his friends were desirous that I should call in another medical man; I accordingly called into consultation my friend, Dr. M'Bride, who concurred with me that the case was one of hysteria, with incipient cerebral congestion. At the time of our first meeting in consultation, the tremulous motion of the limbs, and the quivering motion of the eyelids had ceased, the face becoming more flushed, with throbbing of the temporal arteries, and increasing stupor, from which it was almost impossible to arouse him.

During the early part of the attack when the hysterical symptoms were well-marked, I administered repeated doses of ammoniated tinct. of valerian, and tinct. of assafætida, and sprinkled the patient's face and hands with cold water, which, however, had very little effect. I then directed the patient's head, neck, and chest to be held over the side of the bed, and from a considerable distance, poured a continuous stream of cold water over the exposed face and chest of the patient. The effect was astonishing, perfect consciousness almost immediately returned, and he was able to sit up in bed, and answer questions rationally, and even requested that more cold water should be poured over his face and hands. The good effect of the cold water was, however, but of short duration, for, in the course of a short time after its application, the patient fell into the same state of stupor as before. I tried the above treatment, together with that of assafætida enemata for some time, but as it seemed to be losing effect, and as the cerebral symptoms were increasing, we resolved to try another mode of treatment. Six leeches were ordered to be applied to each temple, and a blister to the nape of the neck, and to be allowed to remain on for ten hours; the leeches extracted a considerable quantity of blood, which was still further increased by stuping the leech-bites, and when the bleeding had ceased, the flush in the face and neck had somewhat abated; the blister was applied to the nape of the neck about five o'clock, P. M., and when I called on the following morning, the patient was able to converse rationally. The friends stated that indications of returning consciousness began to appear at midnight. The patient from this period progressed steadily towards convalescence, and in the course of about a fortnight afterwards, was able to walk a long distance into the country.

The history not only of this patient, but that of his family, is somewhat peculiar, for when the subject of this case or any member of his family see blood, or is subjected to any surgical operation, however trifling, syncope is immediately induced. The subject of this case is by no means of an effeminate appearance, but is tall and well-formed, and wrought for some time as a blacksmith, and at which two of his brothers are still employed. About ten days previous to the hysterical attack, this patient fainted on account of a suppurating finger being slightly punctured with a bistoury. The supposed cause of the attack was some unpleasant words which he had with one of his brothers, some four or five hours previous to the attack. The patient is now in good health, and following his usual employment, which is a kind of carpentry, known to artizans as pattern-making. He does not appear to have suffered much by his late attack.—Medical Press and Circular.

#### DIPHTHERIA.

## By Dr. W. Watson Campbell, Dunse.

On the 18th of May, I was asked to visit a young lady, residing at a distance of about eight miles, who was said to suffer from sore-throat. Here I may remark that her brother resided in the same street where the five cases last referred to occurred, and that he occasionally asked after the children while they were ailing as he passed along. He visited his home while the children were ill, and about ten days after he had been there I was requested to attend his sister. I found her suffering from diphtheria. The exudation was very adherent, of a dirty yellow colour, and extensive—covering nearly both tonsils, the rim of the velum, and the anterior surface of the uvala. She was very feverish and prostrate. She had a shivering three or four days before she was seen, and this was followed by sore-throat, which gradually got worse till I saw her. Deglutition was very painful, and articulation difficult and indistinct. In the treatment of this disease I immediately began with a gargle of the permanganate of potash (grs. x, to the \(\frac{7}{3}\text{ xx.}), recommending it to be used

very frequently. To insure its application to the whole affected surface she was told to swallow a little of it now and then, in order that, should there be any trace of the disease further down than could be seen, it might be flushed (if I may be allowed the expression) with it as often as a little of it was swallowed. Iron and port wine were also used. This patient never went back a day from this time, if we except the retardation of cure by sequelæ. Next day the exudation was much less, and in four or five days it had entirely disappeared; and, though the throat was raw and tender-looking, I was much pleased to find matters going on as they were. From the first application of the gargle her convalescence may be safely dated. From that time the pain began to subside, and deglutition and articulation became more easy. She went to the seaside about three weeks after my first visit, and though she had great weakness in the legs, and suffered from almost complete blindness from amaurosis for some time, she is now quite well.

I have no wish to extend this paper further than the subject requires, but must state that, since the last case came under my care, I have had other ten cases to attend, and that, under the use of the permanganate of potash gargle, the tincture of the muriate of iron, and port wine, every one of these cases recovered rapidly. I would almost make one exception, and in this case—that of a lad about eighteen years of age—there was only a slight weakness in the legs experienced for about fourteen days. Some of these cases I would certainly have despaired of without the aid of the permanganate of potash, so very severe did the attacks seem to be when I first saw them. At the present time I have a very bad case in hand. I was called upon to see him on the 30th of October. He had a shivering on the night of the 25th. On making my first call, his pulse was rapid and wiry, his face pale and anxious-looking, his skin clammy and moist, deglutition very painful, and articulation very indistinct,

The same treatment was adopted in this, as in that of the young lady noticed above. I saw him again on the 2d of November. He was clear and bright-looking, the pain was greatly relieved, and articulation was very much improved. He felt and continues to feel better ever since housed the gargle. I saw him on the 4th again. The exudation, which was of a dirty yellow colour, and very adherent, was nearly gone, and the throat was rather raw-looking. Whether the improvement will continue or not remains to be seen, but I have great hope that he will do well.

Perhaps I may be excused for referring to two or three points in my experience of this disease, which are somewhat interesting.

The communication of infection is not necessarily direct. Indeed, in none of the cases I have seen did the disease seem to pass directly from

one to another, unless where it spread in the family, as in the first cases I have noticed. On five well-marked occasions, it appeared to have been carried by a third party to a distance varying from one to eight miles. On one occasion it re-appeared in the family of the woman attended first in September, 1865, after an interval of six or seven months. Only during my attendance on the last two or three cases have I known scarlet fever to be present in the district.

In some cases of scarlet fever, I have seen whitish pellicles on the tonsils—not very unlike what I saw in my first case of diphtheria; but, otherwise, there was in every case quite enough—even putting the rash out of the question—to distinguish the scarlatinal from the diphtheritic exudation.

In no case of diphtheria did I ever observe an abundant muco-purulent discharge from the nostrils; and though the tonsils are generally felt outside to be hard and large, yet I have never seen in this disease a single case of cervical cellulitis.

In all the cases of scarlatina where I have seen an exudation resembling that of diphtheria, there was not long afterward a well-marked and frequently profuse discharge from the nostrils, and, in some of the cases, very extensive cervical cellulitis.

In some of the cases of diphtheria the exudation appeared to select, as its primary seat, the mucous membrance in the upper part of the larynx; and in some of these, by extension of the exudation, a modification of croup was caused.

In no case of scarlatina, even with intense throat affection, have I ever seen croupy symptoms arise to give evidence of the larynx being affected.

I am not aware that palsy is ever met with after scarlet fever, however severely the throat may have been affected, while palsy very frequently follows diphtheria. Only in one case out of thirty-five that I have had under my care, have I seen dropsy—eedema of the legs only—follow-Dropsy is comparatively frequent after scarlatina.

In such cases of diphtheria as I have tested the urine, the chlorides have never been found absent, and only in two or three cases have I detected albumen. In scarlet fever we expect a deficiency or absence of the chlorides, and are not surprised at the presence of albumen.

Notwithstanding all this, there may have been found, in the experience of others, more conditions common to both diseases than I have met with. I was certainly surprised at the re-appearance of the disease in the same family after an interval of six months—a circumstance which has been known to occur in scarlatina.

With regard to the occasional resemblance of diphtheria to croup, I am

disposed to think it accidental; and that the pellicle of the former differs from the false membrane of the latter in extent, in the rule of place, and in the latter being the result of true inflammation.

From my experience of this disease, I venture to differ from authorities, such as Dr. Regbie, Sen., and Dr. Jenner, with regard to the disease being constitutional. My opinion is that it is not so primarily, but that it becomes so, not so much, perhaps, by the absorption of poisonous matter from the seat of the exudation, as by the effect that the presence of such exudation may have on the nerve centres, through the nerves distributed to the part on which the exudation has taken place. It may be objected that some cases have ended fatally without much local disturbance and this by rapid prostration. Still the time required to effect this prostration, and the amount of exudation which will cause death in this waymay, as with other poisons, differ much in every case, whether acting in, directly or directly. The best reason, however, for supposing that the disease is local at first, is afforded by the success which has followed the local treatment, and also, by what was very apparent to me, that, on the whole, the more rapidly the local disease was removed, the less likely was the constitution to suffer.

Of twenty-three cases of diphtheria which occurred in my practice before I used the permanganate-of-potash gargle, ten died. Of the thirteen who recovered, four had paralysis to a greater or less extent. On the other hand, of the twelve cases which have occurred since (not including that under treatment), none died, and only two have had paralysis.

Since I thought of making this communication I have seen a letter from Dr. N. Evans, in the *Medical Times and Gazette*, of October 27th, in which the report of an interesting case is given, which corroborates very strongly my impression that the permanganate of potash may be safely allowed to exercise a remarkably beneficial effect when used perseveringly, and that even in the worst cases a cure may be hoped for, provided the larynx has not been affected.—*Edinburgh Medical Journal*.

### LECTURES ON INFANTILE CONVULSIONS.

Delivered at the Bellevue Hospital Medical College, By Wm. A. Hammond, M.,D. Professor of Diseases of the Mind and Nervous System.

Gentlemen,—First among the class of convulsive disorders which I design bringing to your notice is ecclampsia, under which term two affections are embraced—the convulsions of the puerperal condition, and those which occur in young infants. The latter I purpose considering this morning.

Like many other diseases, infantile convulsions have frequently certain precursory symptoms. There is an irritability of temper, a brightness of the eyes, an indisposition to eater sleep, slight involuntary movements of the muscles of the face or extremities, starting generally during sleep, and grinding of the teeth; all of which indicate disturbance of the nervous system, and excite the anxiety of the mother, who sees that her child is not in its normal condition; under these circumstances, if an attentive examination be made, other phenomena will be observed. Thus the fingers are widely separated from each other, whilst the thumbs are bent across the palms of the hands, the eye-balls roll slightly at times, or rather tremble, and occasionally there is an almost inappreciable squinting of one or both eyes, which lasts for a few seconds only, sometimes, too, there is pain in the head, and I have, in a few instances, observed very decided evidences of illusions and mental aberration.

These symptoms may continue several days, or only a few hours, or they may be so slight as not to attract attention, or they may be altogether absent. In any event the true convulsive seizure comes on with great abruptness. The child, for instance, may be perfectly quiet in the nurse's arms, suddenly it drops anything it may have in its hand; the body becomes rigid, a slight cry is uttered, the face, which has perhaps been pale, becomes red or purple, the veins of the neck turgid, the respiration is suspended and consciousness is entirely lost. This condition, which is one of general tonic spasm, lasts ordinarily but for a short period -a few seconds-and is succeeded at once by phenomena of a very different character. The limbs are rapidly flexed and extended, the body is alternately bent, and stretched out to its full length; the head is twisted and jerked violently to one side or the other by the irregular and intermittent contractions of the muscles of the neck; the tongue is sometimes protruded between the teeth, and may be bitten as in true epilepasy; froth issues from the mouth, the muscles of the face alternately contract irregularly, and distort the visage; the eye-balls roll rapidly in the orbits, or are turned up, so as to show only the whites of the eyes; the respiration is short and hurried, and the contents of the bladder and rectum are often evacuated; gradually the actions diminish in violence, the child takes a deep inspiration, the body becomes relaxed, a slight perspiration sometimes makes its appearance, and a state of profound sleep, or rather stupour, supervenes.

Such, gentlemen, are the phenomena of an ordinary attack of convulsions in children. As in other diseases there are variations from this type—thus the condition of tonic spasm may be so moderate and short as not to be noticed, or it may constitute the main feature of the attack,

and last a minute or more. The clonic convulsions may be very slight, though involving the body generally, or they may be confined to one side of the body, or may even be restricted within still narrower limits. I have witnessed several cases where only the muscles of the face were involved—others which were limited to the eyes; others, again, which affected a single limb, and one in which there were no disorderly movements whatever, except as regarded the thumb of an hand. In this case there was a prolonged tonic spasm, and loss of consciousness.

Then, too, there are great differences as relates to the duration of the whole attack. Generally it lasts about a minute and a half, rarely more than two minutes, whilst in many cases the paroxysm scarcely extends to half a minute. The cases of continued convulsive movements which have been reported as lasting for several hours, were doubtless, in most instances, repeated seizures, though a case has recently been under may care, in which there were several attacks, each of which was succeeded by a period of stupor, and each of which lasted from thirty minutes to one hour.

Ordinarily after the child has remained in the state of stupour for half an hour or so, a second convulsion occurs. It is rarely the case that a third follows, and sometimes there is only one.

The causes of convulsions in children are very numerous, but they may all be embraced under two classes: Disease or injury of the brain, constituting the *centric* causes, and irritation of distant nerves, constituting the *eccentrice* causes.

The brain and nervous system of children are endowed with a great proportionate amount of irritability, and are consequently readily impress ed by even slight disturbing causes. A fall, a trifling blow on the head an inconsiderable mental agitation, or other trivial source of irritation, produce such an amount of derangement in their organisms as to occasion convulsions, whilst in adults they would give rise to a perceptible mental or physical perturbation. Convulsions are therefore of very common occurrence in children, and we find the causes to vary greatly as to intensity.

Setting aside for the present those cases of convulsions which result from organic affections of the brain, such as tubercular meningitis, tumours, or other severe diseases, and in which they are due not so much to irritation as to structural changes, we find that the most common causes of infantile convulsions are mental excitement or depression, physical shocks to the brain and nervous system, extreme cold and heat, and local and general irritations of various kinds.

The first of these, mental excitement or depression, is quite a common

cause in children who have passed their second or third year, and who have consequently become more capable of intense and varied emotions. I have several times seen very severe convulsions induced by fits of anger, and again apparently be due to the sorrow experienced from parental rebuke. Doubtless such emotional disturbance acts upon the cerebrospinal system through the medium of the sympathetic nerve, and in some way or other deranges its normal action. The convulsions which result from mental agitation, though they may be severe, are scarcely ever repeated, the irritation generally working itself off in a single paroxysm.

Physical shock to the cerebro-spinal system is likewise a frequent cause of convulsions, especially in very young children. A child in running across the room falls and strikes its head against the floor. After the immediate pain has passed away a state of relaxation and apparent fatigue ensues. There may be a little headache, the sleep is disturbed, the thumbs are firmly adducted; there are slight convulsive movements of single muscles or groups of muscles, and the child is irritable and fretful; suddenly the convulsive paroxysm occurs, and is usually repeated several times. In fact, no cause is so productive of a series of convulsive attacks as the one under notice, and they are usually longer in duration than those arising from other causes. Another feature is, that the movements are much more commonly unilateral. Only yesterday I saw in consultation, a little girl who had fallen down a grating in the pavement, and who had, in consequence, been attacked with convulsions. Fully an hour elapsed before they supervened, and then they were confined to the right side of the body. They were repeated many times, and the state of stupor lasted continuously for several hours. No signs of injury could be detected upon the head, and in fact it was very certain that the child had fallen upon its feet and buttocks. The shock to the brain was therefore transmitted through the vertebral column. By the following morning all evidences of disease had disappeared,

Persons cannot be too careful to avoid striking children on the head. I have twice known convulsions produced by not very severe blows on this part of the body, and in one of those they recurred, at intervals, till the child reached the age of puberty.

Extreme cold probably acts by causing hyperæmia of the cerebral bloodvessels. An increased amount of blood in the brain always—unless the quantity be so greatly augmented as to produce stupor through increase of pressure—adds to the natural irritability or erethism of the cerebral and other cranial ganglia.

Intense heat acts differently when the irritation is external and general; acting upon the cutaneous nerves and being reflected thence to the cen-

tral system. The same is true, in a somewhat modified sense, of the convulsions which occur at the outset of fevers and the exanthematous diseases.

Local irritations, however, much more frequently give rise to convulsions than any other cause. Chief among them are those due to dentition, indigestion, and the presence of worms in the intestinal canal. Not unfrequently severe convulsive seizures result from the cutaneous irritation produced by blisters or burns. An instance, several years since, came under my care, in which the presence of a small piece of glass under the skin was the exciting cause of the affection, and I have knowledge of a case in which it was induced by a pin, which had been so placed in the diaper as to prick the skin.

Another cause, which likewise belongs to the class of irritations, but which is not altogether, if at all, one of indigestion, is due to that modification which the mother's or nurse's milk may undergo as a consequence of emotional disturbance. Several cases of the kind have fallen under my observation, and a great many are on record.

Now, as might be expected, all children are not alike susceptible to the action of the causes which produce convulsions. Some will withstand very considerable irritations without being thus affected, whilst others, again, are attacked after very slight nervous disturbance. This difference may be due to inherent variations in the organization of the nervous system, or may be the result of hereditary predisposition. That the tendency to convulsions may be thus transmitted through several generations is undoubted. It is not uncommon to observe that all the children of a family have been subject at some time or other to convulsive seizures, even when examination shows that they differ very materially in mental and physical characteristics. Inquiry is such cases, will almost invariably reveal the fact that one or both parents have been similarly affected, and further research will often show that anterior generations have likewise suffered.

And now, what is the essential nature of infantile convulsions? In other words, what is their pathology? Looking at their causes, we find that nearly all are included in the one word, irritation. Irritation, then, in some form or other, in the great cause of these affections. To understand something of its action you must bring your physiological knowledge into use.

A familiar example of the effect of irritation is afforded by the action of sneezing. A current of cold air impinges upon some part of the cutaneous surface, or some acid substance comes in contact with the Schneiderian membrane, and produces an irritation of the extremities

along the course of the nerves to the central nervous system, and there causes an impression, which is reflected through other nerves as a motor influence to the muscles of respiration. A deep inspiration ensues, which is immediately followed by a sudden and forcible expulsion of air from the lungs. Now, all these muscular actions are entirely involuntary, and are really convulsive in their character. An irritation therefore, may be reflected to the central nervous system, and converted into a motor influence.

I do not wish you to suppose, however, that what we understand by convulsion is identical in its nature with such involuntary actions as that of sneezing. There is a close analogy, and that is all. Let us take a case in point. A child has gone to bed after a hearty meal, consisting of some indigestible substances. It rests uneasily, for the stomach is endeavoring to accomplish a labor which is beyond its powers, and already an irritation is being transmitted to the cerebro-spinal system. A nerve in a state of irritability is a nerve in action. An irritation of a nerve is therefore nothing more than an exaltation of the normal function of that nerve. But if a nerve becomes unduly irritable, the central nervous system, which is in direct connection with it, participates. Hence arise the premonitory symptoms to which I directed your attention in the first part of this lecture. Eventually these central organs become charged, so to speak, with irritability. Motor influences start out to various parts of the body, the brain ceases its control, consciousness is lost, the convulsion is fully established, the irritability is discharged, and a condition of equilibrium is regained. Again and again, if the cause of the irritation remains, a similar set of actions ensues, until at last the nerves of the stomach become exhausted of their irritability and can no longer be excited by that particular irritating cause; just as when we pass a mild current of galvanism through a nerve, contraction takes place in the muscles which it supplies, but after a time this result no longer follows, unless the current be increased in intensity, or some other irritation is applied.

Nor is this all. A condition of extreme irritability of an organ, is accompanied, and in fact, may sometimes be immediately produced, by two very different causes; there may be too little blood circulating through it, or this fluid may be in excess. In the ordinary irritative convulsions of children, the latter is generally the case, but it is also very certain that an anæmic condition of the brain often exists. The importance of discriminating between these two different states, is, of course very great as regards the treatment.

Relative to the pathological anatomy, I have no definite information to communicate to you, except to say that we know little or nothing on the subject. Post-mortem examination generally reveals a more or less con gested condition of the brain, the spinal-cord, or their membranes, with serous effusion into the ventricles, or under the arachnoid; but, in all probability, as Trousseau very justly remarks, these are the consequences of the convulsions, not their immediate causes. That there really is a material change in the structure of the organs involved, scarcely admits of doubt; but our means of research are not adequate to discovering its character. When you are told, therefore, that there is no alteration, I advise you to entertain a healthy skepticism on the subject. The sentiment of pathologists is altogether against the existence of any purely functional disorder.

Infantile convulsions are most common in children between the ages of two and five years. It is said that the tendency increases at about the seventh year, but I doubt it. The period embraced within the extremes above mentioned, is that during which the child experiences most irritation from dentition, from indigestion, and from the presence of worms, and during which, its brain and nervous system are in a peculiar condition of activity and erethism.

The diagnosis of infantile convulsions is attended with no difficulty It is important, however, that you should clearly distinguish between the hyperæmic and anæmic conditions of the brain. The general appearance of the little patient will enable you to do this, and if the anterior fontanelle be still open, you have a very certain means of discrimination. If the scalp covering this opening be depressed below the seat of the cranium, it indicates anæmia of the brain; if it be elevated, it shows hyperæmia.

The prognosis in infantile convulsions must be guarded, but, generally speaking, the simple, uncomplicated irritative convulsions are not dangerous. There is more to be feared from the tonic stage of the fit, than from the clonic, or the stupor that supervenes. The reason for this is very obvious. During its continuance the respiratory process is arrested, and if it lasts as long as a minute and a half, as it occasionally does, death necessarily follows from asphyxia or syncope. What are called inward convulsions, and which consist almost entirely of tonic spasm of the diaphragm and other respiratory muscles, are much more liable to terminate unfavourably than those which are more prominently marked, and which are succeeded by clonic convulsions.

Relative to the treatment of infantile convulsions, I have a few points to mention, which, I think, are of importance. During the paroxysm,

in ordinary cases, there is not much to do; a great deal is done, and with more or less injury to the patient. The application of mustard plasters, or hot water, and such like revulsives, to the extremities and pit of the stomach, can do no good; on the contrary, they may do much harm by increasing irritation. Purgatives, injections, emetics, etc., at this stage of the disease, are also inadmissible, and I have never seen any benefit derived from either warm or cold baths. The tendency of the convulsion is to exhaust itself, and this it usually does in a short time. Therefore, give nature a chance, and let the patient alone. Do not, during the seizure, be officiously treating the cause. When the equilibrium is restored is the time to remove this by an emetic, a cathartic, a vermifuge, an incision, or any other medicine or operation which will strike at the source of irritation. Should, however, the paroxysm continue longer than the ordinary period, or should the tonic stage be severe and prolonged, or should the fits recur frequently, and should the symptoms indicate hyperæmia of the brain, press your fingers gently on the carotid arteries, as advised by Rilliet and Barthez, so as to obstruct the flow of blood to the cranium. This measure will generally be successful in breaking up the fit, and you can resort to it as often as may be necessary. You will thus have opportunity to employ more permanent means, and to remove the cause of irritation. You may also, very safely and certainly cut short or prevent a paroxysm by the use of chloroform inhalations, as recommended by Trousseau. Take a linen handkerchief, pour a drachm of chloroform upon it, and hold it close to the mouth of the patient, in such a manner as not to obstruct the free entrance of atmospheric air to the lungs. Do this for a few seconds, and then remove it, Again apply the handkerchief, and continue this see-saw motion till an impression is produced, or till you have reason to believe that the remedy will not succeed. I have treated a number of cases by this means, and always with success in uncomplicated attacks.

In the "inward fits," or in cases where the paroxysms recur rapidly and frequently, you will derive much benefit from the bromide of potassium, given in from three to five grain doses, repeated every hour or two. This medicine diminishes the amount of blood in the cerebral vessels, and is therefore, not applicable to anæmic cases. It is also a very decided sedative to the nervous system. For these latter, stimulants, tonics, and a position of the body favouring the flow of blood to the brain, should be employed. In one very severe case, where there was very decided anæmia, I made use of hypodermic injections of morphia. The child was six years old, and I injected the twentieth of a grain of morphia, at intervals of two hours, with very excellent results. The

practice is one which should be followed cautiously, and not at all in very

young children, or in slight cases.

The subsequent treatment is exceedingly simple. If you can discover the cause of irritation, remove it. Often you are justified in experimental attempts to find it by using emetics, vermifuges, purgatives or other means which your observation and suspicions may justify you in employing. Hygienic measures should not be neglected. Fresh air, good diet, regular exercise, and the avoidance of undue mental or physical excitement, will materially aid in preventing returns of the attacks. You cannot be too assiduous in using these measures, and no drugs with which I am acquainted can take their place.—Medical Gazette

## Midwifery and Diseases of Aomen and Children.

RIGID PERINEUM.

By G. HURT, M. D., St Louis.

[Communicated for the St. Louis Medical Reporter.]

The article on rigid perineum, by Dr. Beatty, quoted from the proceedings of the Dublin Obstetrical Society, is interesting, both on account of the suggestions of the author, and the great practical importance of the subject of which it treats.

All admit that laceration of the perineum is a serious accident, and when threatened is calculated to fill the mind of the accoucheur with feelings of the most painful anxiety. I have never witnessed the accident, but have often experienced the anxiety which the anticipation of it awakens, in labours which have been protracted for many hours after the feetal head had emerged from the bony strait. I have often had occasion to reflect upon this subject, and though willing to admit that rigidity of the soft parts is usually the primary and efficient cause of the delay at this stage of labour, yet I doubt if it is always the cause of laceration when that accident occurs. For in several cases which have come under my observation, in which laceration of the perineum appeared imminent, the danger did not seem to be so much in consequence of the rigidity as of the relative position of the feetal head in soft parts. Owing, perhaps, to some peculiarity in the anatomy of the soft parts constituting the floor of the pelvis, or of the pelvis itself, or of the position of the fœtus in utero at the time of parturition, the posterior wall of the vagina sustains the almost entire force of the uterine paroxysms, and is thus carried down in front of the fœtal head toward the perineum, and relaxing, permits the

weight of the head to rest upon the posterior margin of the perineum; while, at the same time, the vulva, from want of antagonism, ascends toward the pubes, so as to place it entirely out of the line of the distending force; and while the sphyncter ani muscles are being rapidly and freely relaxed and dilated, those of the vulva are but little disturbed. It is in these cases that laceration is most to be dreaded, from the fact that it commences at the anus and inflicts a dangerous and irreparable injury.

Now, in these cases, the accoucheur may render valuable assistance by passing two fingers of either hand (as the position of the patient may require) into the bowel, and with their palmer surfaces supporting the posterior wall of the vagina, and by a gentle and steady upward pressure direct the feetal head towards the vulva; while, at the same time, the thumb is pressed against the perineum so as to check further distension, and, at the same time, to depress it so as to bring the vulva more fairly within the axis of the distending force. This has been my practice in a number of instances, and so satisfactory were the results that the dread of laceration seldom haunts me now as it did of yore.

This practice may be regarded by some as indelicate, but I can assure those who are disposed to take this view of it, that in a case of real danger, such as we are supposed to be considering, the objection cannot be considered, and their patients will be more apt to thank than to chide them for their well-timed interference; and in cases where the danger of laceration really exists (and none others ought to be interfered with), the anus will be found to be sufficiently dilated to admit the entire hand if it were necessary, and the assistance can be rendered without the slightest inconvenience or discomfort to the patient.

The important indication in these cases is to bring the expanding force of the feetal head in position with the vulva, so as to act with energy upon the constrictor muscles of the vagina, which is to be accomplished by elevating the head and depressing the perineum. For if the head continues to advance in the direction of the lower margin of the perineum, scarcely any amount of dilation or expansion can relieve the patient from the perils of a dangerous laceration.

ON THE INDUCTION OF PREMATURE LABOUR BY THE DOUCHE.

By Thomas Telford, M.D., L.R.C.S.I., Ex-Assistant Physician, Rotundo Hospital.

The induction of premature labour in cases of undersized pelvis, is an operation of great importance to the practitioners of Midwifery, and has, for a long time, engaged their attention; by its means we are sometimes

enabled to save the life of the child, and thus add greatly to the happiness of the parents. Various modes of proceeding have from time to time been adopted, and with a varying amount of success—such as rupturing the membranes, separating the membranes around the os, passing a catheter between the membranes and the wall of the uterus, by the hydrostatic dilator of Dr. Barnes, the administration of ergot, and by the douche; the latter is the plan which I adopted in the three following cases, in preference to any other.

Rupturing the membranes is very uncertain in its action. I have frequently seen women come into hospital hardly in labour, though the membranes had been ruptured some days before admission. Early rupture of the membranes predisposes to a rigid condition of the soft parts, adding a new difficulty to the case; the separating the membranes, or passing a catheter between the membranes and uterus, unless done with great care, is likely to rupture the bag of waters, and is, therefore, open to the same objection. Of Dr. Barne's dilator I have no experience. The administration of ergot, I am confident, is not efficacious in producing labour, as, from a series of experiments I made under the direction of Dr. Denham, master of the hospital, for the purpose of testing the toxic effects of ergot on the fœtus, we found that ergot administered to a woman seven or eight months pregnant, neither induced labour, or exerted any deleterious effect on the child.

The application of the douche is extremely simple, it is best done by placing the patient in the usual obstetric position, with the hips drawn well over the edge of the bed; by passing a full-sized Ferguson's speculum, the os is brought into view, the nozzle of an ordinary syphon syringe is then inserted into the os, and a continuous stream of water injected into the cavity of the uterus. On the withdrawal of the syringe, the water pours out of the uterus in a full stream; this may again be repeated a couple of times, one such application will generally induce labour within twenty-four hours. Before using the syringe you must be careful to fill it with water, so as to exclude the admission of any air into the uterine sinuses. Some physicians advise the alternate use of hot and cold water; this, I think, a matter of unimportance; tepid water is most agreeable to the patient, and should therefore be used; otherwise, as the action of the water is altogether mechanical, it is immaterial whether we use hot or cold. The action of the water closely resembles the action of the uterus, by gradually separating the membranes around the os and cervix uteri. The three following cases illustrate the rapidity with which labour is induced.

Mary Brien, aged 23, pregnant of her second child, was admitted to

Hospital, November 28th, 1866. She has been delivered in the Rotundo Hospital, at Christmas, 1865, by the crotchet, owing to narrowing in the antero posterior diameter of the brim. She was then advised, should she again prove pregnant, to come into hospital between the 7th and 8th month, in order that premature labour might be induced, as we feared, owing to the narrowing which existed, a child at the full term could not be born alive: She neglected to come into hospital till just eight months pregnant, when the probability of saving the child was much less than had she been seen earlier. Having cleared out the bowels, I douched her in the manner already described at 12 noon, November 30th; labour commenced at 2 p.m., the pains being short and frequent. At 12.30 a.m. of December 1st the membranes ruptured, no presentation being then discernible, it being altogether out of reach of the finger.

At 8.30 a.m., I was called to see her, and, on examination, found the right hand in the vagina; the child was alive, as proved by the hand grasping the finger, when introduced. Version was at once determined on, and chloroform having been administered, I passed my right hand, and turned with the greatest care; the breach and body of the child were then delivered; the arms offered considerable resistance, and were with much difficulty brought down; the delivery of the head was then attempted in the usual manner, and a considerable amount of extractive force used by myself and Dr. Denham, but without avail. Fearing that any further force might tear the vagina from the neck of the uterus, I delivered the child by perforating behind the ear and using the crotchet; the child was a male, and much larger than most eight months' children. Her convalescence was rather slow; she suffered from some tenderness of the abdomen for a few days, and afterwards from an attack of sciatica, but went out quite well in a couple of weeks.

The second case is that of Eliza Scott, aged 26, pregnant of her fourth child. Her first two children were delivered by the crotchet. She was then advised to come into hospital when seven months pregnant, should she again prove so; this she did, premature labour was induced by the douche, and she was delivered of a live child in September 1862; the child lived till eleven months old, when it was carried off by measles. Finding herself again pregnant, she applied for admission on the 28th of February of the present year, being at the time nearly eight months gone. The bowels having been opened, the douche was applied on March the 1st, at 11 a.m., and again at 4 p.m.; labour came on that evening, the membranes ruptured at 11 a.m., March 2nd, the os being then fully dilated. The pains were quick and strong, but as the head had made no advance at the end of two hours, and the feetal heart in-

creased in rapidity, delivering by the forceps was decided on. With the assistance of Dr. Cronyn she was delivered, after considerable difficulty, of a healthy male child. Her convalescence was most satisfactory, not a single bad symptom having arisen.

The third case is that of Mary Doyle, aged 21, pregnant of her second child. She had been delivered by the crotchet June 25th, 1866, and was then advised to come in when seven months pregnant, this she neglected doing till past the eighth month. The douche was applied at eleven a.m., June 21st, 1867; labour came on almost immediately; the membranes ruptured at 5.30 p.m., when the right arm was found in vagina. She was put under chloroform and version performed; the arms were brought down with ease, but no amount of traction would deliver the head; the head was then perforated through the mouth and extracted her convalescence was most satisfactory, she going out on the eighth day.

The foregoing cases are interesting as showing the certainty with which premature labour can be induced by means of the douche, when properly employed. In the *Medical Times and Gazette* for November 2nd of the present year, a paper was read by Professor Layarewitch, "On the Induction of Premature Labour by Injection to the Fundus of the Uterus." This operation, however, requires a special apparatus, and is not more effectual than the douche used in the ordinary way.

In two of the cases related the arm was the presenting part, and turning had to be performed. This operation is recommended by Sir James Simpson in cases of undersized pelvis, where the head is the presenting part. On the supposition that the head will mould itself to the pelvis, I have tried it myself in three cases, and seen it done once or twice by others, but the result did not equal my expectations. Of three cases I had myself, the child had to be delivered by the crotchet in all, and in one the uterus was torn from the vagina, the woman dying in half an hour; yet, those were cases considered favourable for the trial.

These cases are brought forward in order to show the facility with which premature labour can be induced.

PERMANENT HEMIPLEGIA OF THE RIGHT SIDE, SUBSEQUENT TO AN ATTACK OF PUERPERAL CONVULSIONS.

Esther W., aged 28, of fair complexion and sanguine temperament, born of healthy parents, was admitted to the Rotundo Hospital, September 19th, 1864, in labour of her seventh child. She has a very foolish expression of countenance, and complete paralysis of right, upper, and lower extremities. On examination the os was found about the size

of half-a-crown, labour came on towards evening, and she was confined at six a.m. on the morning of the 20th, her labour being easy and natural.

On making enquiry as to the cause of her present condition, she stated that she married at seventeen, was confined of her first child at nineteen, and enjoyed perfect health to within four days of her last confinement. About two years ago, she was seized with a fit while in bed, which rendered her completely insensible, in which condition she remained till after delivery. For this illness she was bled twice from the arm, blistered at the back of the neck, and put under the influence of mercury. Ever since this illness she has been subject to fits of an epileptic character, occurring once and sometimes three times a-week; the last of those fits took place on the morning of her admission into hospital, Her convalescence since delivery has been most satisfactory, not a bad symptom of any kind having occurred. Her mind is evidently much weakened, but if her attention is fixed she answers questions very sensibly; she talks slowly, and in a hesitating manner, and is inclined to laugh without any provocation. The tongue, when protruded, inclines to the left side, in which direction the mouth is also drawn." The right hand is firmly clenched, and she cannot raise it without the assistance of the other. Sensation is perfect in both upper and lower extremity. The occurrence of permanent paralysis after puerperal ecclampsia is very uncommon. I have been unable to find a case of the kind recorded. The explanation which I would give of this case is, that the primary attack was one of hyperæmic convulsions, some of the vessels at the base of the brain gave way, and a clot was formed, a portion of which becoming organised, would account for the recurring fits, as also for the permanent paralysis .-- Medical Press and Circular.

#### FOOD FOR BABIES.

FROM an interesting article on "Food for Babies," published in the London Medical Times and Gazette, we make the following extracts.—

Of milk, we have that of the ass, goat, and cow. Asses' milk is by general consent the best substitute for the woman's for most delicate children; and, dear as it is, it is well worth the money. The goat's is a rich milk, with a strong curd, and only adapted for robust children. The milk of the cow is, of course, the staple. And whilst for general purposes it is quite right that milk should be brought from any distant part of the country, it must be confessed that a few cows should be kept in town in hot weather, that their milk may reach the baby part of the population fresh, unshaken, and just as yielded by the animal. But

cows' milk is too rich in curd for the human baby, whose muscular movements are almost confined to breathing, crying, and the heart's action. So it must be thinned, and the simplest way is the common one of adding an equal part of water (the water being gradually diminished as the child grows older) and a small quantity of white sugar. It is a refinement to use the sugar of milk, instead of common cane sugar, but whether there is anything gained we never could satisfy ourselves.

The test of any kind of baby's food is found in the fact that the child thrives-that it is satisfied after its meals, not subject to fits of pain in the stomach and flatulence, nor yet to fits of colic in the bowels-and that the residuum, which is generally produced upon a napkin for inspection, does not show undigested food. All these things are self-evident. A child ought regularly to grow, to be plump, and to gain in weight every week, and if it do not, something is wrong. Secondly, the child ought to be satisfied and go to sleep after its food; but here the junior practitioner ought to be aware of one physiological fact—when a child is in pain in the abdominal organs, it often displays insatiable hunger, has a tendency to suck greedily, and this though the stomach and bowels may be loaded with undigested food. Ignorant nurses kill many a child by inattention to this point. The child cries after food; therefore they say the food is not good enough, "the milk does not satisfy," &c., and forthwith they give the child some half-solid pap, and dose the mother with over-rich food and alcohol. A purgative dose of oil is the best remedy when a baby is unreasonably hungry after food; castor oil is generally used, but any oil or soft fat will answer the purpose. The old custom of giving a bit of the fat of pig is founded on reason and experience. Lastly, the practical fact remains that no undigested food ought to be found in a baby's napkin. Any mother may be taught that lumps of curd and masses of undigested starch can give the child no nourishment, but decompose in the bowels, and cause first pain, next diarrhoa. healthy baby's napkin should not be offensive -of course, it has a faint peculiar odouer, but certaintly it does not stink, and if it do, either improper food has been given, or proper food has not been digested.

In other cases, in order to diminish the proportion of curd, it is useful to give *cream* diluted with new milk and water; and, to prevent the curd of cows' milk from coalescing into hard lumps in the stomach and passing undigested, the milk may not only be diluted with water, but with effervescing soda-water (this is called artificial asses' milk) or potass-water or , lime-water. Sometimes a very little of the solution of magnesia is added.

But this purpose (i. e., the making the curd softer and more diges-

tible) is generally effected by mixing it with cereal food or the starches. Theoretically speaking, we do not want the nitrogenous elements of the cereals, because the cow's milk contains enough of them. Hence, arrowroot or sago may suffice, if it be understood that the child is to live upon the milk, and that these starchy elements are superadded to modify the milk, and not to be substitutes for it. Still, general experience is in favour of some cereal. Barley-water made from pearl barley, and mixed with an equal part of milk, is an admirable food for most children. Robinson's patent barley deserves praise. Oatmeal gruel and milk agrees well with the robust. Brown and Polson's preparation of maize, and the maizena, seem favourite preparations. On the whole, however, wheat tends to displace the other cereals. The flour of wheat is often baked or boiled, and when so cooked is boiled afresh with water and milk. Or it is made into biscuits, of which Robb's, Lemann's, the Norwich knobs, "tops and bottoms," and rusks, are popular samples; or into farinaceous food-that is, a powder composed of wheat flour or biscuit, with or without admixture of other cereals, and already acted on by heat, so as to require little or no cooking (Hard's, Neave's, &c., &c.).

This is the place to notice "Liebig's soup," a compound of milk, wheaten flour, and malt, with a small quantity of bicarbonate of potass. The object of the malt is to convert the starch of the wheat into sugar, and to save the stomach the trouble of that process; whilst the cow's milk is enriched with the phosphates of the wheat and the added alkali. The thanks of society at large are due to Liebig, not only for the care and patience with which he has worked this idea out, and the liberality with which he published it, but likewise for the impetus which it has given to the study of the whole subject of infant food in connection with mortality.

The original recipe prescribes  $\frac{1}{2}$  ounce of wheaten flour,  $\frac{1}{2}$  ounce of ground malt, and  $7\frac{1}{4}$  grains of bicarbonate of potash, to be well mixed with 1 ounce of water; then 5 ounces of cows' milk are added, the whole is heated gently till it thickens; then it is removed from the fire, stirred till the starch is converted into sugar, as indicated by the liquid becoming thin, again boiled and stirred for some minutes, and lastly strained. For use, this requires to be much diluted for young babies, less for older ones.

As for results. We believe that of any six infants one would refuse to swallow it; one would take it without benefit; but that the remaining two thirds would take it greedily and thrive on it. We have known it to put a stop to so many of the miseries arising from undigested or indigestible food, that it has, we think, already earned for itself a perma nent place. What form of it will ultimately be the favourite is another question.

The objections to Liebig's food in its common form are, first, the time, trouble and nicety—it cannot be prepared in less than twenty minutes, and not every nursemaid or mother has the intelligence sufficient. Secondly, there is the considerable amount of indigestible husk, often very difficult to separate by straining, and consisting of spicula that look very formidable to any tender mucous membrane. Thirdly, as a theoretical objection, we mention its too saccharine nature and the absence of fat.

The first objection has been met by Savory and Moore, who have put together and prepared the ingredients in such a way that they only need the addition of water and milk, and no straining nor boiling. Mr. Mellin's preparation, if it can be got, of course avoids all trouble of cooking; and we may say that the malt he uses is most scrupulously cleansed from husk. There is also to be procured at Mr. Van Abbott's a preparation called "Liebig's Food for Infants concentrated," the invention of Mr. Ed. Læflund, chemist, of Stuttgart; it is a thick syrup, containing a concentrated solution of the wheat and malt elements. It has, when mixed with milk in due proportion, a sweet, somewhat empyreumatic, bitter taste, and this is the general character of the food, however prepared; but there is a distinct acid treacly reaction in Mr. Læflund's syrup. Mr. Mellin has made an extract in the form of granular powder, soluble in cold water, very palatable, free from acidity, and much more portable than Læflund's syrup. Lastly, we must notice the very ingenious malt biscuits made by Spikin, Dover Street; these contain the malt and wheaten flour in the form of a biscuit; of course they are portable, and keep any time, and require no more cooking than Robb's or any other nursery biscuit. \* \* \* \* \* \* \* \*

We have now, we trust, set forth a pretty general view of infants' food, and shall add but three or four practical hints:—1. The advantage of adding cream from time to time, especiâlly if the baby is constipated. Want of fat is the cardinal defect in Liebig's soup. 2. The expediency of adding a small quantity of some aromatic water to all infants' food, such as dill, anise, &c. There is a very popular food in some counties, consisting of equal parts of barley-water and milk, with one teaspoonful of good brandy to the pint. Bad for the babies' livers, some would say; but no harm is found in practice. 3. The expediency of giving delicate children small quantities of pure gravy or beef-tea sweetened, or a few grains of raw meat ground up to a pulp. If these-agree, a child is almost safe. 4. No one kind of food can agree with

all childreh. It has provoked us to see children dying on a diet which did not suit them, without an effort to shift and combine various elements till the right thing could be found. 5. The importance of teaching the poor that food for babies should be thin, and that a thin food may be more nutaitious than a thick one. Certes, a modern baby who sucks a good creamy milk and water, or Liebig's soup, through Maw's bottle, may bless itself that it was not born in days when thick currant porridge would have been crammed down its throat with a spoon.

### SYRUP OF CHLOROFORM.

Mr. T. B. Groves gives, in the London Pharmaceutical Journal, the following process for the preparation of a syrup of chloroform which, he says, manifests no tendency no separation:—Put into a twelve-ounce bottle one ounce of chloroform and about three drachms of ether; to the mixture add the same volume of the syrup to be employed; observe carefully the disposition of the fluids, the chloroform and ether will probably sink, then add guttatim more ether until the two liquids, on being shaken together, appear indifferent as to their position in the system; finally fill up the bottle with syrup, and shake well for a minute or two.

The syrup should not be too dense, or it will be difficult to impart to it sufficient agitation to insure the complete commixture of the fluids, The syrup should be composed of gum and sugar, of honey or treacle; syrup of sugar does not answer well, apparently on account of lacking viscosity.

The syrup, thus formed, has the same physical properties as chlorodyne, and like it, is readily miscible with water in any reasonable proportion (one to seven), and soluble in the water where the proportion of chloroform is within the limits of its solubility.

The advantages attending its use are these: 1. It does not need special precaution when being added to watery fluids, and in no ease does it give rise to a deposition of large globules of chloroform. 2. When added in excess of saturation, the undissolved chloroform is deposited in minute globules, which, after lying together for days, show no disposition to combine, but may by a few shakes be dispersed evenly through the liquid, forming an emulsion sufficiently permanent to enable a dose to be measured without difficulty.

# Canada Medical Journal.

MONTREAL, MARCH, 1868.

### THE LATE ARCHIBALD HALL, M.D., L.R.C.S.E.

It is with deep regret that we chronicle the death of Archibald Hall, M.D., &c., Professor of Midwifery and Diseases of Women and Children, McGill University, which event occurred on Friday, 14th February, 1868. He was a comparatively young man, being at the time of his death in his fifty-sixth year. Archibald Hall was the son of the late Jacob Hall, who for many years was engaged in trade in this city. He was educated at the Royal Grammar School under the care of the late Dr. Skakel, and was regarded by his preceptor as a lad of great promise, as in early life he exhibited a strong love for the study of nature, It was the habit of Dr. Skakel during the winter evenings to deliver a course of lectures on various scientific subjects, principally astronomy and chemistry. On these occasions young Hall was his favoured assistant; this formed in the pupil a desire for the acquisition of knowledge, and he devoted much time to astronomy, which was his favourite study. Indeed he shewed a desire for research beyond his years, and the ground-work of his paper on the birds and animals of the District of Montreal was commenced during his early school days. Subsequently he dipped into Natural History, Botany and Zoology, which branches he followed with ardour.

When in his sixteenth year, young Hall decided on studying medicine, and was apprenticed to the late Dr. Robertson in the year 1828, who at that time was lecturer on Obstetrics and Diseases of Women and Children, in McGill College. The mantle of the master seems to have fallen on the pupil, as Dr. Robertson was perhaps the most successful accoucheur of his day. During the trying time of the cholera epidemic in 1832, Mr. Hall, being an advanced student, was placed in medical charge of the cholera sheds at Point St. Charles. Although his daily duty was most arduous, he would repair to the house of his preceptor at night purposely to relieve that gentleman of his night work, who in consequence of his hard wrought professional duty during the day, was glad to seek and obtain as much repose at night as possible. We quote from a recent introductory lecture delivered by the Doctor before the class of McGill College at the opening of the session of 1866, which was published in this journal. "I never can forget the still quietude of the town, when called out during the night to visit for the doctor some new and unfortunate case. Nothing broke the calm serenity of the summer night, while walking or riding through the streets, except the occasional clatter of the feet of some man running for professional aid, or the pitiful cry of another labouring under the disease, and calling for assistance."

It was customary in those days, as it still is with all who can afford it, for medical students to repair to the mother country for the purpose of completing their studies at some of the centres of learning abroad. With this end in view, young Hall went to Edinburgh in the autumn of 1832. There we find him attending the medical classes of the University, and having fulfilled the required curriculum, he first presented before the Court of Examiners of the Royal College of Surgeons, and obtained their license to practice as a surgeon on the 1st of April, 1834. In August of the same year, he submitted to examination before the University of Edinburgh, and obtained the degree of Doctor of Medicine, having selected as his subject for the required inaugural dissertation, "the respiratory functions of plants." Shortly after obtaining the diploma from the College of Surgeons, and degree of Doctor of Medicine in the University of Edinburgh, he returned to Canada, and entered at once into the active practice of his profession in this city. From the local enactments of the day bearing on the practice of Medicine and Surgery in this country, it was necessary for him to obtain a license ad practicandum before the old Medical Board of

the province, which we find he procured at the City of Quebec on the 1st of April, 1835. About this period his literary habits were fully acknowledged in being elected on the 8th of July, 1835, a Fellow of the Literary and Historical Society of Quebec.

Although engaged in professional avocations, which, with all junior practitioners, is an arduous and unrenumerative undertaking, we find Dr. Hall following up his favourite studies Botany and Zoology. In the year 1836 he forwarded to Edinburgh a collection of Canadian plants, and in 1839 he carried off the Gold Medal awarded by the Natural History Society of Montreal for a paper which he prepared on the Mammals and Birds of the District of Montreal. This important paper was published in the Society's transactions in six separate parts, which appear in the sixth and seventh volumes of the Canadian Naturalist and Geologist, 1861 and 1862.

Dr. Hall was always a worker, hence we find him becoming attached to the Medical Faculty of McGill College, in the year 1836. The same year he was elected one of the attending physicians to the Montreal General Hospital, a post which he held up to the year 1852, when he became one of the consulting staff to that charity. He lectured on materia medica and therapeutics, from the time of his appointment to McGill College to the year 1842; in the session of that year, owing to the death of Dr. Stephenson, and the retirement, through failing health, of Dr. Robertson, the chair of chemistry fell to his lot, and he steadily pursued that branch up to the year 1849, when in consequence of other changes he again lectured on materia medica. This position he held until the year 1854, when in consequence of the death of the Professor of Midwifery, the late Michael McCulloch, M. D., he was unanimously selected by his colleagues, and appointed by the governors of the University to fill that important chair, which he held up to the period of his removal by death. This appointment gave him the position of Physician Accoucheur to the University Lying-in Hospital. The members of the Faculty of Medicine in the University being the consulting staff of that Hospital.

As a writer, Dr. Hall was acute and bitter, he could dip his pen in the very gall of bitterness, but withall, a generous

In the year 1845 he started the British American Journal of Medical and Physical Science, and the pages of that journal will be found teeming with articles of worth from his pen. That journal ceased publication from want of pecuniary support in the year 1852. He again assumed the editorial conduct of the British American Journal, which was resusciated in 1860, but survived only three years in consequence again of pecuniary difficulty. In that journal he fought the battle of his college, in times of great medico-political excitement; and the present proud position of McGill University is in a great measure due to his unwearied watchfulness, and manly out-spoken frankness through the pages of his journal. It may be truly said of him that "although dead yet he speaketh." His ability and worth was fully appreciated by his fellow practitioners. In 1856 he was elected vice president of the College of Physicians and Surgeons of Canada East, and at the next triennial meeting in 1859, he was elected to fill the presidential chair.

Nor was his worth unrecognised abroad, for in 1852 we find him elected an associate of the College of Physicians of Philadelphia, and in 1862 his acumen as an accoucheur was recognised by election as honorary fellow of the Obstetrical Society of London, an honour alone conferred on members of the profession occupying a prominent position.

As a physician he was kind and courteous; an acute observer and successful practitioner; in his own department he was the friend of the junior practitioner, ever willing and ready to go at any hour, night or day, to render counsel and assistance to a brother in need of his advice; with him the chance of a fee was of a secondary moment, ever willing, every ready, ever anxious to assist in those serious cases which occasionally fall to our lot, he thought not of self, but his desire was to render service to a fellow creature in distress, thereby carrying out to the fullest extent the Christian attribute of going about and doing good. His remains were followed to the tomb by a large circle of friends and relatives, and as a signal mark of respect, the faculties and students of both universities, of McGill and Victoria Colleges, were present and joined in the mornful cortege.

### CANADA

# MEDICAL JOURNAL

### ORIGINAL COMMUNICATIONS.

Case of Dislocation of the Head of the Radius—Formation of a large Exostosis—Excision of the Joint. Under the care of G. W. CAMPBELL, A.M., M.D., Professor of Surgery McGill University and Dean of the Medical Faculty. Reported by George Ross, A.M., M.D., House Apothecary to the Montreal General Hospital.

Alexander McDonald, æt 23, was admitted into the Montreal General Hospital on the 9th November, 1867.

On the 18th April last, while endeavouring to restrain a vicious horse, he received a severe kick upon the arm; the blow fell upon the upper part of the back of the forearm; the limb immediately fell powerless but there was not much pain, the elbow was stiff and could not be bent to a right angle. He sent for a doctor, who put up the arm in splints, saying that it was broken in the middle of the forearm; these remained on for some weeks, and on removing them he found that the immobility of the elbow still remained. He therefore consulted other medical men, by whom he was etherized and forcible attempts at flexion and extension were made, the case being regarded as one of anchylosis:—this process was repeated on three occasions, with intervals of about one week. He now sought advice in Montreal; he applied to Dr. Campbell, by whom he was told that there was a dislocation of the elbow, and that it would be advisable for him to be operated upon in Hospital.

Upon admission, the condition of the arm was as follows:—the forearm was permanently extended, and when at rest remained in a position between pronation and supination; it could not be moved through an are of a circle covering more than at most 15°. On attempting to bend the forearm, the limb was brought up with such a sudden, harsh jerk as to lead to the conviction that it was produced by the collision of one bone

against another;—pronation and supination could be almost perfectly performed. The biceps was semewhat wasted from want of action, but the forearm was well developed, the action of its muscles being scarcely at all interfered with. There was a very considerable firm prominence on the front of the external condyle, but on rotation of the arm the head of the radius could not be felt rotating in this situation, although just below this the bone could be distinctly felt to move. The olecranon and the two condyles of the humerous could be felt, apparently in their normal relative position. The diagnosis, therefore, was dislocation forwards of the superior extremity of the radius alone. For various reasons, and especially the probable changes which had taken place in the joint owing to the active interference since the accident, it was determined to resect the joint rather than attempt excision of the displaced head of the bone-

Accordingly on the 10th November, the elbow was resected by Dr. Campbell, the H-shaped incision having been used. A light wooden internal rectangular splint was applied, fastened only at either extremity by a few turns of flannel bandage, and the arm rested on a pillow. Some arterial bleeding occurred towards evening, but was checked by iced water.

Nov. 11th.—Wound to be dressed with a lotion of carbolic acid 3 ss Aquae. Oj.

Nov. 12th.—Splint removed.

Nov. 20th.—Ligatures all came away; wound in great part united by first intention; moderate discharge of healthy pus from the dependent opening left. Began passive motion; cold water only to be applied.

Nov. 25th.—Sat up to-day with the arm in a sling.

Dec. 1.—Wound entirely closed except the lower opening, from which comes a small quantity of matter daily, and a small orifice at the superior angle of the transverse incision which communicates with a short superficial sinus. Free motions are daily made in all directions.



Fig. 1. Fig. 2.

The following are the appearances of the ends of the bones which are at present in the Museum of McGill University The olecranon is in its

normal position, the head of the radius is completely natural in appearance, but is displaced forwards on the anterior aspect of the external condyle of the humerus; covering the head of the dispocated bone, and forming an entirely new socket for it, is a large mass of adventitious bone from one-eighth to one-quarter inch thick. It is rough and irregular on its external aspect, and presents one moderate-sized fenestra from imperfect development; it is about one and a half inch in width, and extends from the extreme margin of the condyle to about the middle of the trochlea of the humerus, just allowing space for the coronoid process of the ulna to lie beneath it. (Vide Figs. I and 2.) At its base is seen the pit or excavation about three-fourths of an inch deep in which lies the head of the radius. The inferior aspect is broad, and it gradually bevels upwards, approaching the humerus, until about one and a half inch above the trochlea, it terminates against the anterior surface of the shaft of that bone.

Staphylorrhaphy in a case of Congenital Fissure of the Hard and Soft Palate. By R. P. Howard, M. D., L. R. C. S. E, etc., Professor of Medicine, McGill College. Reported by John Bell, M.. A., M.D., House Apothecary Montreal General Hospital.

The success of the following operation is due to the untiring perseverance of the surgeon in performing it and the admirable fortitude of the patient James Rowen, who submitted to it. He is a young man from the country, nineteen years of age, healthy and robust.

He was admitted into the wards of the Montreal General Hospital on the 14th of March, 1867, and allowed to remain for several days before the operation was performed, to accustom him somewhat to the hospital air, and by digital manipulation to render the mouth and pharnyx less irritable when touched.

The cleft was quite symmetrical. It commenced within half an inch of the incisor teeth and extended back through the hard and soft palates dividing the uvula longitudinally to its very end. The width of the fissure was about a third of the space between the molar teeth.

On Friday, 22nd March, Dr. Howard performed the operation, the patient sitting and without chloroform. The operation consisted in dividing the *levator* and *tensor palati* muscles midway between the hamular process and the edge of the cleft, then paring the edges of the cleft in the soft palate and bringing them together with fine silk sutures of which six were used.

Passing these sutures through the edges of the cleft formed the most difficult part of the operation. On one side they were introduced by means of short curved needles fixed in a porte-aiguille; after being loosened from this instrument the needles were drawn through by means of a pair of long forceps. On the other side of the cleft some of the sutures were introduced by means of fish-hook needles whose eyes were near the blunt end, and others by means of a needle curved like a fish hook near its point, close to which also was its eye, and furnished with a long handle, (originally used for closing a vesico-vaginal fistula.)

By Monday the parts were somewhat inflamed and the sutures covered with lymphy pus. On Wednesday one suture was removed to relieve the tension of the parts, on Thursday two more were removed, on Friday a week from the date of the operation another, and on Saturday the last suture was taken out, leaving more than two-thirds of the part which had been pared, or about one half of the cleft, firmly united. The inflammatory blush had now almost entirely gone and the parts resumed a very natural colour and appearance. The uvula and portion of soft palate portion closed brought together by four stitches united, that by the remaining two,next the hard palate, did not unite either from its extreme tension or from not being brought quite into contact.

For nine days after the operation the patient was not allowed to speak and his diet consisted entirely of fluids. The fissure in the soft palate, was thus closed leaving an oval opening through the hard still to be filled up. On the 4th of April the patient was sent home to the country to allow the tissue to become thoroughly organized and strengthened before any attempt would be made to close the remainder of the fissure.

In a fortnight after his discharge he returned to the Hospital, the object for which he was sent home being now well accomplished. In articulation there was little or no improvement, and the voice had still a sniffling nasal character. April 20th; To-day, Dr. Howard completed the operation in the following manner. The edges of the opening through the the hard palate were pared, an incision was made on each side of the roof of mouth parallel with the edge of the fissure, and close to the alveloar ridge and the strap of tissue consisting of the mucous membrane, submucous tissue, and periosteum raised completely from the bone by means of a strong laterally curved dull knife. The edges of this strap of tissue which had been previously made raw were now brought together with silk sutures, and cotton wool was inserted into the lateral incisions. Considerable tension was required to bring the edges of the straps of tissue together at the point of union between the soft and hard palate and it was feared that here there would be sloughing.

In this as in the former part of the operation the stitches on one side were introduced by means of a short curved needle fixed in a holder. On the opposite side the difficulty was to get the sutures through from above downwards. This was accomplished by threading a needle of the same kind with the loop end of a doubled thread, passing the needle through the membrane, removing the needle, inserting the upper end of the first suture through the loop and drawing this back through the membrane. All the sutures were introduced before any were tied. A running knot was first tied which was slipped up to the required tightness and on this a common knot was then made.

Wednesday, 24th April.—Some of the sutures were removed to-day. The two sides have firmly united with the exception of a small space adjoining the soft palate. The cotton still adheres in the wounds. Friday—More stitches and the cotton removed. The wounds to be syringed with a weak solution of permanganate of potash. The straps are quite adherent to the bony roof of the mouth. Monday—One stitch only remaining. The opening between the soft and hard palate is just large enough to allow a small pea to pass through.

The patient has not spoken since the operation and he has been fed wholly on fluids.

He was now again discharged, Dr. Howard intending at some future period to close up the remaining hole in the palate.

February, 24th, 1868—Rowan to-day presented himself at the Hospital for inspection. The aperture left between the portions closed at the two operations is completely filled up, a firm whitish cicatrix, somewhat in the form of a cross, marking the place where it had been. Two raphelike cicatrices remain in the sites of the lateral incisions, but so nicely have the edges of the cleft coalesced that the line of union can scarcely be pointed out. In articulating, his words have still a very marked nasal sound, to remove which, months, or years even, of vocal gymnastics may be required.

Montreal General Hospital, February 29th, 1868.

De la Syphilis Vaccinale, par E. LEMIRE, M.D., gradué de l'Université du Collége Victoria.

MM. les Rédacteurs: —A défaut d'organe médical français et quoique j'aurais pu faire les observations qui suivent dans la langue anglaise, je m'adresse en français pour deux raisons. La première c'est pour répondre au généreux appel que vous avez déjà fait dans votre journal à tout le corps médical, d'accepter la collaboration de chacun dans sa propre langue

et de faire de votre journal l'expression de la médecine en ce pays; la seconde c'est que je désire que ceux qui comprennent le besoin d'un journal médical français et qui y ont déjà concouru amplement, sachent que vous êtes prêts à recevoir le fruit de leurs études, de leurs observations et de le livrer à la publicité dans l'intérêt de tous. Certes, au moment où les différentes nationalités s'effacent pour s'embrasser sous un même drapeau et ne former qu'une seule nation; à mesure que l'horizon politique, nationale s'élargit, les aspirations de chacun doivent le suivre et s'élever au dessus des petites difficultés intestines qui existent dans le corps médical, difficultés qui ont généralement pour base une question de race et pour mobile la jalousie. Est-ce que le médecin doit s'enquérir de la nationalité, de la couleur politique de son patient? Certes non, quelqu'il soit, c'est un frère, un être humain dont la santé, la vie, lui sont confiées et dont il doit répondre consciencieusement. J'espère que l'Association médicale canadienne qui vient de naître et qui a vu réunis autour de son berceau, tous les médecins des différentes parties du pays, sans distinction d'origine, sera une garantie que l'intérêt de la médecine comme ses devoirs envers la société seront bien compris et mis à exécution.

Avec ces quelques remarques, MM. les rédacteurs, j'entre en matière-Il est une question qui depuis quelques années en Europe attire l'attention du monde médical, soulève des discussions jusqu'au sein de l'académie de médecine de Paris et qui est du plus haut intérêt, tant au point de vue de la science que de la société en général; question qui, si on arrive à des résultats probants, devra avoir les conséquences les plus graves. Je veux parler de la transmissibilité de la syphilis par le virus vaccin. Quand Jenner donnait au monde la vaccine, ce fut certes une des plus belles découvertes dont la médecine se soit enrichie et Jenner lui-même n'aurait pas cru que cette vaccine portait en elle-même sa propre destruction et qu'en fille ingrate elle devrait un jour lui reprocher sa naissance; qu'au lieu de l'innocuité qu'il lui reconnaissait, elle renfermaitau contraire le germe d'une maladie encore bien plus désastreuse et plus effroyable que celle dont elle était appelée à protéger l'humanité. Si l'on étudie la marche de la vaccine, ses résultats depuis déjà assez longtemps, on est tenté de croire à son inutilité dans bien des cas et à une extrême incertitude quant à son innocuité; innocuité que des expériences récentes rendent plus que douteuse et contre laquelle se rangent un grand nombre de célébrités médicales, entre autres Mr. Depaul, directeur de la vaccine en France. Si donc pendant longtemps on a pu croire que le virus vaccin ne pouvait produire que la vaccine, qu'il possédait une telle puissance transformatrice de manière à pouvoir modifier dans son sens toutes les humeurs du vacciné, et leur ôter ainsi toutes leurs propriétés organiques particulières et

propres à l'individu vaccinifère, l'observation et l'expérience sont venues semer le doute et des recherches ultérieures sont appelées à le confirmer. C'est donc une question du plus haut intérêt pour la société qui a droit de demander si le vaccin ne peut donner que la vaccine, ou si le père, en demandant l'inoculation pour son enfant dans le but de le prémunir contre une maladie dangereuse en soi, il est vrai, mais non constitutionnelle, héréditaire, court le risque de lui voir introduire dans le sang une maladie constitutionnelle plus horrible dans ses résultats que la variole : la syphilis enfin. Si donc la vaccine peut transmettre la syphilis, ce que semblent démontrer de récentes observations, la réponse est très-grave ; grave pour le médecin vaccinateur sur qui pèse une plus grande responsabitité, y eut-il défectuosité dans le mode de vaccination ou le virus vaccin fut-il mauvais ; grave vis-à-vis la société, car au lieu de prémunir ses enfants contre les atteintes de la petite vérole, le père de famille voit sa progéniture s'étioler, maigrir, et apprends mais trop tard, que dans ses veines coule un sang empoisonné pouvant déterminer des manifestations morbides dans un temps plus ou moins éloigné, incertain, et dont les conséquences sont incalculables. Car qui peut dire eneffet où finit la syphilis? Un symptôme se présente, un second lui succède, un troisième, et ceci à des intervalles impossibles à déterminer et malgré les meilleures conditions hygiéniques possibles dont soit entouré le malade, on ne connait donc pas plus la fin de la vérole que son origine, malgré le progrès de nos jours. La question de la transmissibilité de la syphilis par le vaccin est à l'ordre du jour ; la discussion est engagée et des deux côtés combattent des hommes d'expérience tels que Ricord, J. Guerin, Depaul et plusieurs autres. Si le résultat de ces discussions peut établir le caractère inoffensif du vaccin, il peut être donné à quelque période que ce soit de son évolution sans danger; si au contraire il peut transmettre les humeurs du sujet vaccinifère, la scrofule, la syphilis, (ce qui devient probable) il nous reste à savoir s'il ne serait pas mieux de réintroduire le cow pox. En attendant que les savants de l'académie de médecine se soient prononcés, je n'ai certes pas la prétention de vouloir donner mon opinion dans cette matière, et le voudrais-je, je n'ai pas l'expérience nécessaire et le champ restreint d'observations que j'ai à parcourir ne m'en offre pas l'avantage; cependant, je viens d'être témoin d'un cas à l'appui de la syphilis vaccinale que je ne saurais laisser passer sans donner l'éveil et encourager les médecins à observer attentivement les résultats de leurs vaccinations, surtout les médecins vaccinateurs de cette ville qui ont l'avantage d'inoculer beaucoup et dans toutes les conditions d'existence sociale possible. Le 15 Février dernier je fus appelé dans une famille pour deux enfants malades de la rougeole; après les avoir examinés, la mère me montra un troisième enfant agé de 18 mois

me demandant ce que je pensais de lui. Elle me dit qu'il était malade depuis qu'il avait été vacciné, c'est-à-dire à peu près un mois, et depuis cette époque il souffrait continuellement. En effet je vis un enfant maigre, chétif, couvert d'une éruption squameuse avec un engorgement des ganglions sous maxillaires et cervicaux, le bras offrait au lieu du vaccin un ulcère profond, pouvant contenir la pulpe du doigt, à bords durs; il y avait en même temps sur le dos ce que la mère appelait un grain de picote qui n'était autre chose qu'un Ectyma syphilitique. Au bout de quelques jours les ganglions cervicaux s'ulcérèrent et laissèrent une plaie de la grandeur d'une piastre française offrant les mêmes caractères que l'ulcère du bras ; je crus reconnaître une syphilis constitutionnelle dûe à la vaccine, et priai un de mes confrères de cette ville de venir voir mon petit malade, mais malheureusement l'enfant était mort avant qu'il ait eu le temps de le voir. Voilà donc un cas qui, à mon sens, ne laisse aucun doute quant à la présence de la syphilis, suite de la vaccine, chez un enfant sain jusqu'alors et issu de parents forts; les deux autres enfants jouissent d'une santé excellente et ne présentent aucun symptôme d'affection syphilitique. Sans être alarmiste, je crois à la possibilité de la transmission de la syphilis par le virus vaccin et je considère que le médecin encourt une grave responsabilité s'il opère sans connaître intimement le sujet vaccinifère.

Montreal 15 Mars 1868.

Cases of Delirium Tremens, treated by Pulv. Capsici. Contributed by ROBERT W. JACKSON, F. R. C. S. I., Surgeon 100th Royal Canadian Regiment.

Attention has lately been directed to the employment of Cayenne pepper in delirium tremens by Doctor Lyons, an eminent physician in Dublin. As its use in the subjoined cases seemed attended with beneficial results the following abstracts are submitted.

J. M., age 37 years.—Has taken spirits in excess for a considerable time; reported himself sick on the 27th January 1868, with slight erysipelas of face; was detained for the day, had warm fomentations to face, and an aperient draught; as he was no better at the evening visit, he was kept in hospital, his pulse was 80, and temperature 100.

January 28. Had a bad night, raved, face now is more swollen, tongue furred, pulse and temperature same as yesterday. Mixture of Chlorate of Potass and infusion of Cinchona; continue fomentations, and the patient to be carefully watched.

January 29th, was restless and noisy all night, disturbed the other pa-

tients; he thought he was drilling a squad and carrying on other details of duty, the delirium tremens well marked, saw rats creeping over his bed, clammy sweat, expression of face wild; it required four men occasionally to prevent his doing mischief. Cuticle of face desquamating, right ear much swollen.

January 30th, violent and noisy all night, pulse above 120, weak, and compressible, sweating profusely, has taken scarcely any nourishment since admission; as the general symptoms of debility were marked, a form of nutriment frequently prescribed by my predecessor Dr. Chartres and which I find very useful, composed of 2 pints beef tea, 8oz. brandy and 3 eggs, was ordered to be given to the patient in small quantities, 3 j, Pulv. Capsici to be added to the 1st. dose, the capsicum to be repeated in the evening; he took most kindly to this stimulating compound; when seen in the evening he had taken both doses of Cayenne, had no uneasiness or irritability of stomach, was still restless but less noisy.

January 31st. Continued sleepless and uneasy during the night, fell a sleep at 7. A.M., and continued to sleep till 11.30. A.M. In the evening he was sensible, the erysipelas had extended to both ears and over back of scalp, the parts affected being very painful. Tongue cleaning, pulse 108 soft. To have chicken diet and porter and citrate of iron and quinine in five grain doses. He slowly recovered his strength and was discharged to duty on 24th February.

H. P., age 26 years.—Has been but 4 times in hospital since enlistment; although he has not the character of a drunkard, it appears he has been for a long time in the habit of drinking spirits to excess. Had a fit in barracks and was brought to hospital in a sleigh at 4. A.M., the morning of the 28th January last; as he remained insensible and the convulsions continued, I was sent for and saw him at 6. A.M., the struggles which were very violent at first were now much feebler, the right side being alone affected, the limbs on left side partially paralysed. Pulse 110, face livid, pupils natural, bladder empty, he remained in this state during the forenoon, and at 2. P.M. had a return of the severe epileptiform convulsions. In the evening he became sensible and answered questions rationally, his temperature 100. He had at the same time a wild expression of eye and kept constantly casting suspicious glances around.

January 29, was noisy and restless all night and was kept in bed with great difficulty, complained that rats, snakes &c., were crawling over the bed clothes, in fact this patient and J. M. who suffered from similar hallucinations at the same time, and in the same ward, carried on spirited battue against noxious reptiles, hour after hour. H. P. having suffered on a previous occasion from tape worm, it was thought the epileptiform fit

might depend on the presence of the animal, a dose of castor oil and turpentine was ordered; he spat it in the face of the attendant; since his admission he has steadily refused food and medicine.

January 30th. Slept none, is less noisy, when he leaves his bed, he falls, the left arm and leg being paralysed; he took some milk during the night, but refuses nourishment in any other shape, is constantly picking the bed clothes. Face uneasy and suspicious, skin moist. Pulse 108. Thermometer cannot be used he is so violent.

January 31st. Sleepless last night, pulse 72 soft. Tongue covered with greyish fur, bowels have been very costive since admission; to have a rhubarb draught with 3 ij Tinet Capsici added; he appeared to relish a small quantity of the beef tea, brandy and egg mixture J. M. was taking. At the evening visit H. P. was found much weaker. Voice indistinct and low delirium present, the aperient had not acted. Two doses of Pulv. Capcisi gr. XXX each were ordered to be given him before night in the beef tea and brandy mixture.

February 1st. Slept a great part of last night, was asleep at the morning visit, bowels well cleared. Ate a good dinner but still rambles in speech.

February 2nd. Improving in every respect.

February 3rd. Had a slight return of the raving; mended steadily to February 6th, on which day he was marked for discharge; while waiting in hospital during the day he had an attack of partial paralysis of fingers of left hand and of left leg, the fingers being semiflexed with muscular twitchings, and the muscles of back of leg attacked with cramp, an intelligent orderly remarked that the cramps were like those he had seen in cholera.

H. P., manner at the time was strange, with wild expression of countenance, temperature 100.

February 7. The cramps have altogether ceased, he is quite rational, and he continued to improve and was discharged to duty on February, 10.

REMARKS.—From the results following the capsicum treatment in the above cases, I should certainly be disposed to try its effects again, the previous habits as well as the complications existing in each case afforded a presumption that the delirium tremens would be severe. Dr. Girdwood late of the Grenadier Guards saw these cases on the 31st January with my colleague Dr. Thompson, 100th Regt, and I am sure they will pronounce them typical cases of delirium tremens.

As we were of opinion that opium was contraindicated in both instances, in J. M.'s case from the tendency to cerebral congestion due to

the erysipelas of head, and in H. P.'s case in consequence of the probable existence of a rachnitis with effusion denoted by the epileptiform convulsion affecting one side with the increased temperature (100), it was suggested by Dr. Thompson that the capsicum treatment would prove beneficial.

I did not recollect at the moment the doses of capsicum Dr. Lyons had recommended, and I found after on reading his paper that in J. M.'s case I had given on each occasion double doses, however, no uneasiness or irritability of stomach resulted and with both patients sleep came on the night after the administration of the capsicum.

### REVIEWS AND NOTICES OF BOOKS.

The Principles and Practice of Obstetrics. By Gunning S. Bedford; A.M., M.D., Professor of Obstetrics, the Diseases of Women and Children, and Clinical Obstetrics, in the University of New York; author of "Clinical Lectures on the Diseases of Women and Children." Illustrated by four coloured Lithographic Plates and ninety-nine Wood Engravings. Fourth edition, carefully revised and enlarged, 8 vo., pp. 763. New York: William Wood & Co.

We have received a copy of this work from the author, for which we tender our thanks.

Of the merits of the work itself, we regard it as a standard volume on the subject of obstetrics. The present edition has received at the author's hands a thorough revision, and some important additions have been made. Much valuable and important information will be found under the heading of Anæsthetics. Although we think that this subject is of too great importance to be dismissed in a little over eight pages, still, perhaps, the reader may consider the subject as sufficiently referred to, in a work on obstetrics. The author has abandoned the use of chloroform, and has recourse exclusively to sulphuric ether, which he has always found safe and reliable. Our own experience is in favour of chloroform, which we consider safe if employed with care. It certainly acts more rapidly than ether, but its application should be entrusted to a competent person who will devote his whole and sole attention to the administration of the anæsthetic:

"In reference to the particular circumstances justifying the use of anæsthesia in the lying-in room, there is no concurrence of opinion among

accoucheurs; on the contrary, there is much diversity of sentiment. With some it is the universal habit in every case of labour, no matter how natural and auspicious it may promise to be, to resort at once either to sulphuric ether or chloroform. This, it seems to me, is really abusing a good thing. Labour is unquestionably a natural process—it is, indeed, entitled to be designated in strict physiological language a function. this be so, is it right to interfere with a function, properly so called, as long as its exercise is normal, and within the true record of nature? I think not. Again, there is another argument, which has always struck me with force, why anæsthesia should not be employed in a natural parturition, and it is this-the female, at the most interesting period of her life—the time of labour, should, all other things being equal, have her mind unclouded, her intellect undisturbed, her judgment fully adequate to realize and appreciate the advent of a new and important era in her existence—the birth of her child, Therefore, I shall advise you not to resort to anæsthetics in natural and ordinary labours, except in the event of certain contingencies which, in the judgment of the accoucheur, would justify their administration. The employment of these agents will be proper in cases of operative midwifery, whether instrumental or manual; in cases of unusual pain accompanying the labour; in instances of rigidity or an unvielding condition of the mouth of the womb, vagina, or perineum; in a womb of excessive nervous irritibility; in certain cases of irregular contraction of the uterus, in which the strength of the mother is severely tested without a corresponding progress in the delivery; in many cases of puerperal convulsions, provided there is no tendency to cerebral congestion; in spasmodic contraction of the uterus before the birth of the child, and subsequently to the birth, the placenta being retained by the spasm of the organ. In some conditions of pregnancy—for example, where there is a degree of undue irritability of system, or the hysteric manifestation, or where it becomes necessary to extract a tooth; and I may remind you that I have on several occasions derived marked benefit from the administration of sulphuric ether in cases of rebellious dysmenorrhea. Let me here add that, in the irritibility and convulsions of children, etherization will oftentimes exhibit the happiest results."

We cannot altogether agree with the author in the argument here advanced. It is a natural process for a tooth to ache when there is disease of the fang or where from caries the extremity of the nerve is exposed, but because it is a natural process for a nerve to give evidence of its presence when pressed upon, is no argument against using the means which nature's god has permitted us to discover for its relief.

In our experience, we have never yet seen the woman who could give birth to her child with "unclouded intellect," or whose judgment was undisturbed throughout parturition. The author does not mention a most undoubted effect of the use of anæsthetics during the parturient stage, and that is the tendency to post-partum hæmorrhage. The attention of the profession was first drawn to this subject by Dr. Kidd of Dublin, in a paper which appeared in the Dublin Medical Press. We have frequently had an opportunity of witnessing the effect of chloroform in producing a species of muscular inertia subsequently to the birth of the child, and are opinion, that if long continued, chloroform does occasion a tendency to post-partum hæmorrhage. So that all cases in which we have administered the ancesthetic during labour, we have followed it up by a good dose of ergot prior to the removal of the placenta. Indeed in several cases we noticed most persistent and alarming hæmorrhage, apparently caused by a want of muscular tonicity, the uterus remaining placid and without action or tendency to contract.

The work is illustrated by four beautifully executed coloured lithographs, shewing the appearance of the areola of the breast at various periods of gestation, and also by ninety-nine wood engravings. The paper is excellent, and the type well impressed; altogether the work is most creditably got up by the publishers.

Pensylvania Hospital Reports, Vol. 1, 1868. Philadelphia: Lindsay & Blakiston. Montreal: Dawson Brothers.

After an existence of one hundred and twelve years, the Pensylvania Hospital, founded in 1755, its corner stone being laid by the hands of Franklin, has issued its first volume of reports, and an exceedingly creditable production it is. It contains many papers of great merit, and of a practical character, most of which we have read with much interest The volume opens with a short paper on "The Pensylvania Hospital and Remniscences of the Physicians and Surgeons, who have served it," from the pen of the well known and venerable Charles D. Meigs, M.D. A brief allusion is made to the most prominent men who have been connected with the hospital, among them the names of Drs. Physick and Rush are mentioned, and several anecdotes are given to illustrate, not only personal traits of character, but peculiar modes of treatment then in vogue. The style adopted in this article many will perhaps be inclined to find fault with as at times bordering on what we may call the free and easy, but the venerable professor seems more at home in this method, as all who have read his work on "The Diseases of Women,"

can testify. There is a difference of opinion as to the desirableness of this style in a purely professional work, but if allowable at all in anything pertaining to our profession, it is in a sketch such as opens the first volume of the Pensylvania Hospital Reports.

The first really professional paper is on "Laceration of the Female Perineum," its history and treatment by D. Hayes Agnew, M.D., who in about forty pages gives a very excellent resumé of the literature of the subject. He, at the same time, publishes ten cases which he treated in hospital, with very marked success, after the method peculiarly his own, which he describes in the following words:

"Agnew's Operation.—In every operation our aim should be to render it as simple as may be consistent with efficiency; and therefore the question comes up, can any part of the Brown method be omitted without diminishing the value of the operation? In support of the affirmative, I submit the plan pursued by myself, and illustrated by a sufficient number of cases to give it some claim to public confidence.

Preparatory Treatment.—This is pursued in accordance with that already laid down, except in the matter of opening the bowels with a gentle cathartic, which I prefer being given two days rather than one before the operation, and followed by one grain of opium, so that everything shall be quiet when the period comes round.

Position.—The position on the back, or the lithotomy position, is the one always preferred. The hips should be brought over the edge of the bed, and the limbs, flexed, should be supported by an assistant on either side.

Operation.—The operator takes his position, either sitting or kneeling, in front of the perineum, and seizing one side of the laceration, commences the denudation from behind forward, including a little of the labium. In breadth it should extend inward, so as to include a little of the vaginal mucous membrane, and outward towards the buttock. The paring should not extend deep, and, when completed, should be one inch broad. The opposite side is to be treated in the same manner, the raw surfaces in form and extent being as near alike as possible; next, let the assistants supporting the limbs, take hold of the parts on either side, and make the recto-vaginal septum tense, in which condition its surface can be freshened, without difficulty, to the extent of three-quarters of an inch. Let every attention be given to ascertain no portion escapes the The bleeding is usually free, but it will be seldom necessary to apply a ligature. Should it not cease under the application of ice-water, a stream from the nozzle of a syringe applied steadily for some time will rarely fail. Should both fail, introduce the sutures, and rely on the adjustment.

Sutures, and their Introduction.—The approximation is to be effected by the interrupted suture—one series termed the deep, and the other the superficial—the materials composing the thread being silver wire. The deep ones are to be first introduced, commencing with the posterior or one next to the rectum. Three or four of these will generally suffice, even in extensive cases. The superficial ones are to be inserted intermediate to the others.

The needle, being threaded, is made to penetrate one side, entering one inch exterior to the denuded border, and coming out on the mucous membrane of the vagina. It is then unthreaded, and the needle withdrawn, and the same end of the wire again passed through its eye, when it is made to penetrate the opposite side at points corresponding with the first. After this manner the other deep sutures are to be inserted.

Adjustment.—The blood being carefully sponged away, the nates are to be pressed toward each other by the assistants, and the ends of the suture first introduced (the one nearest to the anus) are to be passed through the whole in the adjuster, at the end of the forceps, and being strongly drawn upon as the latter is carried down, the parts are brought together with great accuracy. To maintain and secure the approximation, a perforated shot is next run down over the wires, and firmly clamped between the jaws of the compressor. After the treatment of the other sutures in a similar manner, the operator proceeds to deposit the superficial threads. These must be placed between the others, to effect which a good-sized curved needle, armed with silver wire, is entered three-eights of an inch from the edge, on one side, made to penetrate the skin and some little into the cellular tissue, and emerge an equal distance from the edge on the opposite side. These may be secured by twisting the ends about each other. This done, the sutures are to be cut offthe superficial ones at the twist, and the deep ones on a level with the shot.

A strip of adhesive plaster, two and a half inches wide and twelve or fourteen inches long, may now be placed across the nates, to give additional support, and the woman put to bed, with the knees bound together with a roller, taking care to interpose a napkin between, to prevent excoriation. The position to be maintained is either on the back, or the side, the patient not being rigidly confined to either."

The treatment after Dr. Agnew's operation is much the same as after other methods, except that he removes the sutures on the third day, taking them out in the same order as their introduction and immediately after has a stream of tepid water containing a small quantity of the permanganate of potash thrown upon the parts. If all goes on well, he allows his patients to sit up on the sixteenth or seventeenth day. Dr.

Addinell Hewson, contributes a short, but exceedingly valuable paper on the still much vexed question of "Accupressure," of which method for arresting hommorrhage, he is an enthusiastic admirer. He says. " I have now had an opportunity of testing it on all large vessels of the extremities, and with me its employment, has always been pre-eminently satisfactory. In parts where the ligature has often proved so unsatisfactory as to make some more effectual means of permanently closing the bleeding orifice, a great desideratum, as in the axillay artery, palmar, plantar arches, or in other parts where the vessels give off branches close above the point, at which it is desirable to effect the obliteration of the calibre, this method has been found by me all that could be wished for." Two cases are reported, where accupressure was used, and the patients having died, an opportunity was afforded of examining the condition of the part. In one, a man aged 40, a hard drinker, with distinet traces of ossific degeneration in all the large vessels, amputation of the lower third of the arm was performed. But one pin was used, applied to the brachial to control hæmmorrhage; this was removed fifty-two hours after its introduction, not the slightest oozing following. The patient did not do well, having died on the twenty-fourth day after the operation. At the autopsy the pin was found to have compressed the brachial, just above its divison, and its closure was complete. The adhesions of the outer surface of both the internal and middle coats was both firm and strong. Altogether this case, the patient having become delirious soon after the operation, was a very trying one for accupressure, but it stood the test most thoroughly. We are sure Professor Simpson will gladly welcome this able contribution on accupressure.

Dr. J. M. Da Costa, furnishes a few observations on the action of Narcein, accompanied by ten cases in which he administered it. This drug it is claimed, relieves pain, and produces sleep, without the sickness and headache or constipation which so usually follows the employment of opiates. The value of such an article could scarcely be overated, but from what we gather from Dr. Da Costa's experience, accompanied by some slight experience of our own, we fear that its merits has been overated. Dr. Da Costa says, it does not as a rule cause vomiting, headache or constipation, but it does sometimes, and in doses equal to morphia it has not the slightest anodyne effect. In large doses it is uncertain, often inert.

We cannot speak too highly for the way the publishers have done their work, for it is one of the best printed, and handsomest volumes which has lain on our table for sometime.

### PERISCOPIC DEPARTMENT.

### Surgery.

THE OPERATION FOR THE CURE OF DOUBLE HARE LIP, BY A NEW AND IMPROVED METHOD:

BY A HAMMER, M. D.

The section on the Surgery, of the American Medical Association at its meetings in Cincinnati, in May last, having honored me by the request that I should prepare a full report on the progress in surgery, concerning the treatment of Hare-lip, to be presented at its next meeting, to be held in Washington, in May, 1868, it does not now become me to treat at length on this subject in our Journal. I will therefore confine myself solely to the description of the method, which I have, for the last five years, adopted in all cases of double hare-lip with fissure of the palate.

During a quarter of a century I have had frequent occasion to operate for hare-lip, in all its various forms, single, double and complicated; and I freely confess that for twenty years I was never satisfied with the results obtained, though mine were, on the average, not worse than those of other surgeons. I was frequently amused by looking at plates, where cases of hare-lip were pictured, before and after operation, showing beautiful and perfect results, whereas a comparison between the copy and the original would not have given a very flattering impression as to the ability or truthfulness of the artist.

The unsatisfactory results obtained in my own former practice, and present practice of other surgeons, did not, and do not depend so much on the want of individual skill, as upon the intrinsic difficulties inherent to the nature of the lesion itself, and the deficiencies of the means employed to correct the deformity. The main points to which the frequent failures in double hare-lip with fissure of palate must be attributed are: The rarity of union by first intention in the soft parts, or union of one portion with non-union or connection by ligamentous mass of the remainder; the infrequency of firm union of the intermaxillary bones with the lateral alveolar arches, and the resulting unevenness by lack of proper a daptation with regard to the convexity of the entire superior alveolar arch; the frequent mutilation of the nares, either by closing them up, or leaving them widely separated, the flat nose in the superlative.

Nearly all the difficulties with which the surgeon has to contend, can be overcome by following the method of operating which I have adopted.

The operative procedure consists of two steps: First, to bring the

maldirected intermaxillary bones into proper position and to make them fit exactly the opening left in the middle of the alveolar arch. This I accomplish by excising a triangular piece of the septum of the nose, of such an angle as to correspond to the angle made by the projecting inter-maxillary bones with the arch. After it has gently been removed downwards and backwards, the surgeon can judge how much or how little is to be cut off on one side or both, that the gap may be exactly closed. I give preference to this method of changing direction over all others.

Second: To separate, as may be required, the middle lobe from the intermaxillary bones, then to freshen its edges as well as the margins of the lateral parts of the lip, resorting if necessary to auxiliary incisions, in various directions according to the peculiarities of the shortening in the soft parts, accompanied by free and extensive incisions over the underlying bone so as to allow of great mobility of the lip. This being done, and the hæmorrhage arrested, I apply a sustaining suture, which is in fact a quillwire-suture, at a proper distance from the edges, to be united. Two pieces of common, smooth lead pencil, from one and a-half to one and three-fourths of an inch in length, and a strong needle armed with a double wire of a size larger than is ordinarily employed in the usual wire suture. are all that will be required? The needle is passed through the entire thickness of the upper lip on a transverse line striking the point of union between the septum and intermaxillary bones. The needle is made to transfix the integument from without inwards on one side, at a point half an inch posterior or outwards from the nostril, and through a corresponding point, but from within outwards, on the opposite side, and now the two pieces of pencil, one on either side of the face externally, are fastened by the double wire. Another similar suture is applied in the same manner and attached to the same pieces of pencil, about half an inch below the first, more near or remote according to the length of the intermaxillary bones, over which, that is to say in front of which, both wires must pass. By this means we accomplish a complete relaxation of the soft parts, and all tension of the muscles being overcome, the corresponding portions of the cut edges can now be readily approximated, to do which I employ the common wire suture the, wire being very small,-finding it less irritating than silk. Thus the operation is completed, no dressing being required except the occasional application of a little glycerine by means of a camel's hair pencil, upon the united wounds. The wire sutures should be removed at the end of three days' union by first intention having then taken place, while the sustaining suture may be allowed to remain to the sixth, seventh, eight or ninth day. The wires of the latter in course of time cut somewhat the soft parts, producing four small, transverse, slightly suppurating wounds, which, however, heal without leaving any marked scar behind.

The advantages of the above plan of procedure are so obvious that I need scarcely refer to them, but in brief they are the following:

First, The intermaxillary bones are kept in close contact with the parts with which it is desirable they should unite, by the wires of the sustaining suture.

Second, All strain on the lips being removed the soft parts must unite by first intention, it cannot be otherwise provided all chemical or mechanical irritants are wiped from the wounds, which can so readily be done by a hair pencil.

Third, The degree of relaxation necessary to properly control and modify the future shape of the nares is entirely at the command of the

surgeon.

Fourth, The absence of all dressing which would interfere with free respiration and thereby endanger life.

Fifth, The operation is complete at one session, and comparatively speaking, a very brief space of time is required for complete and permanent union.

Sixth, The surgeon is relieved from an immense deal of trouble and constant attention, which is so necessary when other operative plans of treatment are adopted.

Seventh, The results are admirable, thereby not saying too much.

This method is not altogether new, as it has been resorted to, but only partially and for a different object, by Prof. Bruns, of Tubingen. Many years ago he applied a sort of quill suture, passing out one such beneath the nostrils through the septum narium to prevent too great narrowing of the nares, and in one instance he again applied a single quill suture near the free margin of the lip, in an unmanageable child, lest the lower suture when removed might be followed by rupture of the united wound. His fear in this last instance was certainly to some extent groundless, for in five cases out of six the rupture occurs, not near the free margin, but in the neighborhood of the nares.

The actions mainly of two muscles, viz: the levator labii superioris alæque nasi and the levator labii superioris proprius, has to be overcome. The zygomatici and the levator anguli oris are little to be feared, as any one can convince himself by applying his index fingers to the two sides of his lips, imitating my sustaining suture.

Though the meritorious and highly distinguished, Prof. Bruns did not apply the quill suture either in the same manner or for the same purpose, yet I thought it my duty to show that I was acquainted with the fact though irrelevant.

I earnestly desire the profession to give my modus operandi a trial,

being assured it will meet with their approval. Of myself I can, without boasting, affirm that I am not now fearful of any form of complicated hare-lip no matter how extreme the case may be, and that I now with pleasure and satisfaction perform an operation which formerly caused me more disappointment than any other one.

Five cases of double hare-lip and double fissure of the palate on which I have successfully operated according to the above plan I will minutely detail in my report to the American Medical Association.—Humboldt Medical Archives.

### FOREIGN BODIES IN THE EAR.

By Henry L. Shaw, M.D., (Communicated for the Boston Medical and Surgical Journal.)

A Foreign body in the ear is always a source of anxiety to the friends of patients; and although its removal, if accomplished in season, is quite easy, it is often by delay rendered very difficult. Most of the foreign bodies met with in the ears of children are put in while at play, and are often forgotten. With adults their introduction is almost invariably due to the use of extemporaneous ear picks for the relief of the intolerable itching in chronic inflammation of the dermoid layer of the external auditory canal.

The ear is more tolerant of foreign bodies than is generally supposed. Cotton, which, from a belief in its virtues, is frequently introduced into the meatus, would often remain for an indefinite time, if the patient was not admonished by the increasing deafness to seek relief. Toynbee speaks of a dissection where cotton, which had probably been in the ear for years, produced absorption of the bony meatus. We can recall several cases where it remained for many years, unknown to the patients. Other foreign substances may be carried the same length of time. In a late number of the Lancet is the report of a case, where a piece of slate pencil was left in the ear for over forty years. In one of our own cases, a stone, the size of a pea, remained in the canal for years before trouble was produced, and it was then caused by attempts at removal. Still another case was that of a playmate, who carried a bean in his ear for twenty years, with no bad effect, except slight deafness.

In our own experience the following substances have been met with; beans, cotton, slate pencils, peas. maggots, cockroaches, beads, glass, crockery, shells, paper, pins, ivory, teeth of combs, stones and seeds.

The amount of trouble produced by foreign bodies in the ear depends upon their nature, position and size. Hard, smooth substances, and those not easily affected by moisture, produce far less trouble than those of softer material, which are readily expanded.

At about the middle of the external auditory meatus the canal is angular. This change in its course serves somewhat as a check to the passage of foreign bodies. It is in this part of the canal that they are apt to lodge, and may remain for years before producing any injury. In works on anatomy the external meatus is described as being narrowest at the middle. The meatus, just before it reaches the membrana tympani, is somewhat expanded, as is also the entrance. With the exception of this dilatation at the ends, its diameter is quite uniform. A casual glance might lead one to suppose that there was considerable narrowing at the angle, but on straightening the meatus this apparent narrowing will disappear. An examination of the casts at the Warren Museum, taken by Dr. R. M. Hodge, confirms the above statement.

The symptoms caused by the presence of a foreign body, depend very much upon its position. When imbedded in wax, as is often the case, or fixed on the walls of the meatus, it will not be likely to cause serious trouble Not, so, however, if it is at the bottom of the canal, in contact with the membrana tympani, or pressing upon it. Such a case is usually attended with giddiness, and a feeling of fulness of the head; which, if the foreign substances, allowed to remain, may be followed by convulsions and even a fatal result. One would suppose, from the fact that casts of hardened cerumen are occasionally taken from the lower half of the canal, that the membrana tympani would readily tolerate the presence of a foreign body. When pressure is applied over that portion against which the handle of the malleus rests, it is attended with pain and marked cecebral disturbance. The same is true of the rest of the drum, but in a less degree. Besides the injurious effects above alluded to, the pressure of a foreign body on the membrana tympani is very likely to be followed by ulceration and perforation of that membrane, and organic changes in the tympanic cavity, which will seriously affect its integrity. Many cases of internal otitis owe their origin to this cause. We can recall two cases of the kind; in one of which the suppurative process was arrested by the removal of a piece of slate pencil, which protruded into the tympanum; in the other, the suppuration was undoubtedly prolonged from the presence of a glass bead in the tympanum.

When a foreign body is so large as to fill the whole diameter of the auditory canal, and press with considerable force upon its walls, it will almost invariably excite acute inflammation. In some of these cases the swelling is so great as to completely close the entrance of the meatus; rendering even an exploration impossible. When in this inflamed con-

dition, the ear will be found to be very sensitive. The use of the speculum auris at this time will give rise to excruciating pain, and will be likely to be followed by considerable hæmorrhage. Under these circumstances all attempts at removal should be deferred, until the acute symptoms have subsided. Great relief will often be afforded by the application of leeches in front and below the external meatus, warm fomentations, etc. Occasionally, when suppuration begins, there will be a spontaneous discharge of the foreign substance.

In most cases foreign bodies are lodged in the angular portion of the canal; the exceptional cases being those where, from unsuccessful attempts at removal, they have been pushed through the membrana tympani, or where that membrane, from previous inflammation, or ulceration induced at the time by the pressure of the foreign bodies, has been perforated and has allowed them to pass beyond it. One would suppose that that it would be impossible for a judicious practitioner to produce this result. This accident is, however, not uncommon, and can doubtless in most cases be traced to attempts at removal with instruments when the ear was poorly illuminated.

It is rare for foreign bodies to remain long in the tympanic cavity without producing serious symptoms. These will be modified somewhat by the nature of the substance, and the condition of the tympanum. If this has been previously disorganized by inflammation, as in most cases of otitis interna, less trouble will probably ensue, than when it is in its normal condition. Beans and peas, the foreign bodies most frequently met with in the ear, are, from the facility with which they swell, most likely to produce fatal results. Undoubtedly in some cases the fatal result is due to the violent manipulations to which the ears have been subjected by the friends of patients, or to their not having consulted the surgeon, until inflammation and swelling have ensued, which rendered their removal extremely difficult or perhaps impossible.

When a patient is presented with a suspected foreign body in the ear, it is of great importance to examine thoroughly the auditory canal: much useless syringing may thus be avoided. By the improved method of Troeltsch this examination is possible at all times, and brings to view the whole of the meatus, and if necessary the tympanum.

Too much cannot be said in favor of the syringe for the removal of foreign bodies, of whatever kind, from the ear. As a rule it will be found successful; the exceptional cases are indeed very rare. Most authors agree as to its great advantages over all other instruments. Yet, to judge from the cases presented at the Infirmary, one is led to believe that practically it is not much relied upon by the profession. With the syringe,

accidents which sometimes attend the use of other instruments are avoided, as it is almost impossible with it to injure the surrounding parts. When the ear is well illuminated a foreign body may often be removed with instruments much more quickly than with the syringe, yet there is more risk; and the attempt, if unsuccessful, may, by injuring the walls of the canal, render removal of the substance by the syringe more difficult.

In this connection it may be well to speak of the manner of syringing an ear. Although generally considered an easy matter, it is often, from the non-observance of certain precautions, very ineffectual. The most important precaution is to straighten the canal, which, as is well known, is readily effected by pulling the external ear upward and backward with the left hand, while the right is free to use the syringe. By so doing we avoid putting the nozzle of the syringe into the external meatus, and thus frequently save the patient much pain, at the same time are enabled to act directly upon the foreign substance. The choice of a syringe is a matter of less importance; any one having a tightly adapted piston will usually succeed very well. The small two ounce rubber syringes, the pistons of which are generally accurately fitted, will be found the most reliable and convenient. The water used (which should be quite warm and pure)ought to be injected with very slight force at first, afterward the force may need to be considerably increased. The bursting of bubbles of air in the external meatus gives rise to very unpleasant sensations. This can generally be avoided by using a good syringe, and taking the precaution to filt it very slowly, so that no air shall be sucked up.

The facility with which a foreign body can be syringed from the ear depends somewhat upon its position, and very much upon the material. If it has passed but a short distance into the passage, a few syringesful will often be sufficient. Not so, however, if it is at the bottom of the canal, or impacted. Then the syringe may require to be used many minutes. Hard, smooth substances, as stones, beans, etc., are dislodged more readily than those of softer material, as paper, cotton, etc.

Foreign bodies sometimes become quite firmly attached to the walls of the canal, as in the interesting case reported by Dr. E. II. Clarke, where a bullet fixed in the bony meatus was removed by pressing upon it a strip of adhesive plaster, and then heating it by means of a convex lens until it adhered to the bullet. Should the symptoms admit of delay in these cases, the removal of foreign bodies may well be deferred, the passage being frequently filled with tepid water, until they are sufficiently loosened to allow their easy removal with the syringe.

Sometimes the foreign substance so completely plugs the meatus as

not to allow the water to pass behind it. This, however, can only be ascertained by trial with the syringe. Many cases when examined by the speculum appear to be in this condition, but on using the syringe the foreign bodies are readily discharged. If, after continued syringing, the foreign substance is not removed, its position can sometimes be changed by the pointed end of a curette, or probe, when the syringe can again be used with greater probability of success. Only a very slight change in the position of a body is usually sufficient to ensure its removal with the syringe. Sometimes, however, the syringing has to be continued for a long time before it is successful.

With infants and young children great difficulty is often experienced in preventing violent movements of the head during the attempt at removal. An effort to straighten the canal even may be followed by a change in the position of the patient's head. When the passage is inflamed, the pain attending the removal may be very severe. Under these circumstances the use of ether will be found not only of great advantage, but frequently indispensable.

Cases requiring the exclusive use of instruments, are very rare. A most thorough trial of the syringe should always be made first. Instruments are, however, occasionally of great assistance, and sometimes absolutely necessary. To use them with safety the external auditory passage requires to be thoroughly illuminated; unless this can be affected, there is danger of producing more injury than might result from allowing the body to remain. A pair of rectangular forceps furnished with teeth will be found of great service for the removal of substances which admit of being grasped, as paper, cotton, etc. The principal risk in their use is the danger of pushing the body further into the canal. This can be avoided generally by fixing it with the pointed end of the curette, before grasping it with the forceps.

The curette and other instruments are sometimes used as levers, by making a fulcrum of the walls of the canal. This method of procedure should always be avoided. If the body is but a short distance in the meatus it can be removed more easily and with less risk than by this method. If the body is well advanced in the canal such a course can do no good, and may be of positive injury to the soft parts. Cases which seem to require the use of instruments in this manner, can be best treated by fixing the body with the curette, and then grasping it with the forceps as above described.

After the removal of foreign bodies there is generally considerable vascularity not only of the meatus, but of the membrana tympani. This is often due to the irritation produced by the foreign substances, but it is usually attributable to the efforts at removal. It is, however, of short duration, lasting frequently less than a day.

But little after-treatment will generally be required. In cases accompanied with considerable inflammation of the meatus, it may be necessary to use injections of tepid water. Should it show a tendency to become chronic in its character, the addition of a few grains of acetate of lead to the ounce of water will generally be found sufficient to arrest it.—Boston Medical and Surgical Journal.

TRAUMATIC DESTRUCTION OF THE POSTERIOR PORTION OF URE-THRA, SLOUGHING OF SCROTUM AND RESTORATION OF PARTS:

BY GEORGE WILSON, M. D., NEW YORK.

The case was one of traumatic destruction of the posterior portion of the urethra of some ten inches in extent, with sloughing of a large portion of the scrotum, so that both testes were freely exposed to view, with restoration of the continuity of the parts. A young man about twenty years of age, a painter by occupation, was engaged on a warm day in June, in painting the front part of a three-story house. At the time of the accident, he was standing on the window-sill of the second-story painting the outside sash; on raising his hand up to push down the top sash, he lost his balance, turned a somerset as he fell, and landed astride the iron railing in front of the area, which was slightly bent by the weight of his fall. He was conveyed to his house; and on examination I found a fracture of the pelvis on the right side through the pubic portion—with laceration of the lower portion of the penis involving the spongy, and as I afterwards thought, the bulbous portion of the urethra, with severe contusion of the scrotum and testes, so that through the wound there was a strong seminal odor, which at the same time caused me considerable uneasiness for fear of loss of one or both testes. After bringing about reaction which was very slow, however, the nervous shock being so great, the first thing he complained of was a feeling of fulness in the region of the bladder, with a desire to urinate, and an inability to do so. After some difficulty I succeeded in introducing the catheter, and drew of a large quantity of blood, which, from the heat of the body and the weather was inclined to coagulate, and which added greatly to the difficulty of getting it to flow through the catheter. I judged from the hæmorrhage, that the bulbous portion of the urethra was involved in the laceration, and that the hæmorrhage came from the artery of the bulb. In the course of a couple of hours I again introduced the catheter, and found that the hæmorrhage still continued, and

drew off a considerable quantity more of blood. I then surrounded the scrotum and hypogastric region with pounded ice, and allowed the catheter to remain in the bladder, and in this way I finally succeeded in arresting the hæmorrhage. At the same time I kept giving him stimulants, and in that way managed to keep life in him, which at times seemed to be fast ebbing away. The next morning, I was suddenly called to see him, as his attendant thought that he was dying, and I do assure you he was very near it. I was by his bedside, and gave him carb, ammonia dissolved in brandy and water until he gradually rallied; he had one more sinking turn, and after that he went along and made very fair progress towards recovery. The contused parts went on sloughing, so that finally the catheter was exposed for some two inches in extent; then followed purulent infiltrations in the scrotum, which were relieved by free incisions; then came sloughing of the scrotum in which both testes were freely exposed, so that as the scrotum lay upon a cushion which supported it you could take them between your fingers. The catheter 1 kept constantly in the bladder, removing it about once in twenty-four hours, as at the end of this time there was considerable deposit of earthy phosphates upon the end of it, which caused considerable distress to the patient on withdrawing it and also retarded very much the healing process, owing to the rough accumulation lacerating the parts on its withdrawal, and undoing all that I had done in getting the parts to heal, But by steady perseverance day by day, we gained little by little; the parts began to heal kindly, the deposit on the catheter grew less and less, and still keeping the catheter in the bladder until the parts had all grown over it, and by drawing the scrotum together, we succeeded in getting that to heal also with nothing to open; so that to all appearances he was as good as ever, as far as practical purposes were required. The testes gave me no trouble, and I presume that they were in their normal condition. He got married afterwards, but whether he ever had children or not, I do not know. The fracture of the pelvis I treated with a broad leather belt, which was made to buckle snug around, and which answered all the purpose for which it was required. I attributed the recovery in this case in a great measure to the patient himself. At the time of the accident his system was in a very good condition; he possessed a great deal of nerve, very sanguine and buoyant in his temperament; he had a good deal of what is called vis vitæ or tenacity of life. Had he not possessed this physical organization he would most undoubtedly have sunk; but possessing it, he rallied, clung to life, and recovered.—Medical Record.

## Medicine.

THE TREATMENT OF CHOREA BY THE SULPHATE OF ZINC, WITH A REPORT OF FOUR CASES.

By E. S. Dunster, M. D., Physician to the Out-door Department of Bellevue Hospital.

The publication, by Dr. Hammond, in the Gazette of Nov. 2, of two cases of chorea successfully treated by the sulphate of manganese, induces me to present the following cases, in which a cure was effected by another mineral tonic, viz., the sulphate of zinc. In all of these cases, no medication whatsoever, beyond the zinc, was employed; there was, therefore, no perturbating element to be allowed for in estimating the efficacy of the remedy. The hygienic treatment of the patients, however, was most rigidly enforced, and it is to this element in the treatment that I desire to call especial attention, for my belief is that almost any analeptic medication will suffice to cure this troublesome affection, provided the strength and vigour of the system be maintained by proper hygienic and nutrient means. Indeed, very many cases, left to themselves, will recover without medication, if the patient be put through a course of nourshing food, wellregulated exercise, careful cleanliness, abundance of fresh air, frequent change of surroundings, proper moral influences, etc.; or in other words, if due attention be paid to the rational and hygienic treatment. The very success of so many different remedies which have been so largely extolled by various authors, substantitates this view; for, in general, it may be assumed that where, in the treatment of any given disease, a large number of remedies is found to be successful, there is an intrinsic tendency in that disease to recovery. I do not, therefore, claim for the zine any special advantage over the other remedies which have been used as specifics in this disease, and would especially caution against too great a reliance upon such. The rational treatment of each case should be a study in itself, and should never be overlooked.

One or two points in the three cases are worthy of notice.

1st. No amendment was observed until the dose of the sulphate had reached some eight or ten grains; but it must be borne in mind that a certain length of time is necessary for the effects of the rational treatment to be noticeable, the question therefore naturally arises to which element in the treatment was the success due. My own opinion (as may be inferred from the above remarks) is, that the two mutually aid and accelerate each other, and that either part of the treatment, by itself, would not prove as speedily or thoroughly successful as when the two are combined.

2nd. The connection of chorea with rheumatism, as first pointed out by

Dr. Copeland, and subsequently confirmed by the observations of Bright, Begbie, M. See, and others, is seen in two of these cases,

3rd. In two of the four cases the choreic movements were unilateral, one of the right, and the other of the left side. A large series of cases would not probably show so great a proportion of unialteral cases. The weight of testimony to be gathered from the books being that, while in the earlier stages the movements are more marked on one side than the other, subsequently, the whole body is apt to become affected.

Lastly, there is to be observed the readiness with which the stomach accustoms itself to large and emetic doses of the zinc.

Daniel Sheehan, et. 11 years, came under my observation December 28th, 1866. There was no positive history of any previous acute disease, but the boy had suffered during the winter and spring preceding from some of the symptoms of rheumatism. The irregular muscular movements came on very gradually, and were exclusively confined to the right side. They had existed in such degree as to attract the attention of the parents only for four months past. The movements were not unusually violent, and the case did not appear to be a formidable one as the lad was as well developed as could be expected in the condition of life to which he was subject. The bowels were not constipated but somewhat irregular; appetite fair but variable; heart beating heavily and somewhat tumultously; apex displaced to the left, and the breadth of the organ increased one-half or three-quarters of an inch; sounds normal, except that the first was very much subdued; the movements cease during sleep.

The most explicit instructions were given as to the care of the patient, the regulation of his diet, exercise and habits, in a word, his whole plan of life, and I have reason to believe they were carried out as completely as could be under the circumstances. The sulphate of zinc was administered internally, commencing with one grain three times daily. This was incressed gradually until the dose had reached ten grains, when decided amendment took place. The dose was once more increased to twelve grains, three times daily, at which point it was continued for a week, and the medication was then gradually but rapidly diminished. February 15th, although the patient was still under treatment, there was no indication of the disease, and on the 25th, he was discharged. The heart's condition remained unchanged.

Albert Smith, New York, at five years, was first seen by me Febuary 1. He had then well-marked general chorea. No antecedent disease-The patient is a bright-eyed, intelligent, well-nourished lad. The functions of the bowels, skin, and kidneys, are well performed. No indication of any cardiac disease, either functional or organic. The parents were inclined to

think that much of his disability was due to habit, and my observations subsequently led me to the same opinion, as the lad could easily control the movements by an effort of the will. The movements were wholly confined to the muscles of the arms and face, the eyes especially taking on a singularly mischievous appearance from the peculiar twinkling motion of the lids.

General treatment as in Case 1. The zinc was also administered internally, viz.: Feb. 4, 2 grains; 6th, 3 grains; 8th, 4 grains; 10th, 6 grains: 15th, 8 grains, per dose. At this time there was marked improvement, and in the course of the following week, no movements were perceptible which the child would not readily control. The medication was then stopped abruptly, but the disease returned, and during March the whole plan of treatment had to be again gone over. The amount of zinc was now pushed to 12 grains three times daily (March 20th to 25th), and withdrawn gradually. April 4th, the amount was 4 grains in each dose. April 10th, medication discontinued and patient discharged cured.

Eliza Kinney, N. Y., æt. nine years, was brought to me Feb. 5, 1867, suffering from general chorca of a very aggravated character. The case was acute, being of only two weeks'duration, and had followed an attack of inflammatory rheumatism. The movements were violent and very irregular; indeed, so excessive were they that the little patient could neither walk or talk. The arms were thrown about in the wildest confusion: nothing could be held in the hand; the legs were flexed, extended or crossed in the most absurdly erratic manner; the tongue would be protruded and suddenly withdrawn; the jaws would open and close with a vicious snap, and even the large muscles of the trunk participated in the movements. Distinct articulation was impossible, and only liquid food could be swallowed, and the patient, from loss of sleep and want of proper food, was rapidly losing strength. Altogether the case was the most violent one I have ever witnessed. Ausculation of the heart was unsatisfactory, as the excessive contortive movements interfered with the proper examination in this way.

The same general plan of treatment was adopted as in the previous cases, and the directions as to the care of the patient were necessarily explicit on account of the gravity of the case, and yet from its rapid development it was fair to infer that so soon as an impression was made on the disease it would yield quite rapidly. And such proved to be the fact. The sulphate was carried only to 6 grains per dose in about 14 days, when there was a manifest amelioration of the symptoms. The amount was increased then to 8 grains per dose, at which point it was continued until the 25th of March, and then rapidly withdrawn, as the

patient was entirely free from every evidence of the disease. I saw this patient again in October; there had been no return of the difficulty, and the patient was hardly recognizable, so great had been the change in her appearance and condition. She had regained her flesh and strength and colour; articulation was perfect and all her functions were naturally per formed.

Emma Witmeier, N. Y., at. nine years, was brought to the Hospital Dec. 2. She had chorea confined to the left side, and not extreme in its character. One year previously she had typhus fever, and during convalescence from this there was a slight attack of chorea, which yielded readily to treatment, the nature of which was unknown to the mother. Three months previously the mother reports that she had pneumonia, though from an examination of the symptoms from which she suffered at that time I am disposed to question the correctness of this statement. Immediately following this illness the chorea manifested itself. The appetite was variable; disgestion fairly well performed; bowels very irregular, but not much constipated.

The treatment was commenced as in the other cases, but after a few days the patient discontinued her visits. The result, therefore, cannot be ascertained.

#### ON THE USE OF NITRITE OF AMYL IN ANGINA PECTORIS.

By T. Lauder Burnton, B. S. C., M. B.

Nitrite of amyl was discovered by Balard, and further investigated by Guthrie, who noticed its property of causing flushing of the face, throbbing of the carotids, acceleration of the heart's action, and proposed it as a resuscitative in drowning, suffocation, and protracted fainting.

Little attention, however, was paid to it for some years, till it was again taken up by Dr. B. W. Richardson, who found that it caused peralysis of the nerves from the periphery inwards, diminishing the contractility of muscles, and caused dilation of the capillaries, as seen in the web of the frog's foot.

Dr. Arthur Gamgee, in an unpublished series of experiments, both with the sphygmograph and hæmadynamometer, has found that it greatly lessens the arterial tensions both in animals and man; and it was these experiments—some of which I was fortunate enough to witness—which led me to try it in angina peetoris.

During the past winter there has been in the clinical wards one case in which the anginal pain was very severe, lasted from an hour to an hour and a half, and recurred every night, generally between 2 and 4

A. M., besides several others, in whom the affection, though present, was less frequent and less severe. Digitalis, aconite, and lobelia inflata were given in the intervals, without producing any benefit; and brandy and other diffusible stimulants during the fit produced little or no relief. When chloroform was given so as to roduce partial stupefaction, it relieved the pain for the time; but whenever the senses again became clear, the pain was as bad as before. Small bleedings of three or four ounces, whether by cupping or venesection, were, however, always beneficial; the pain being completely absent for one night after the operation but generally returning on the second. As I believed the relief produced by the bleeding to be due to the diminution it occasioned in the arterial tension, it occurred to me that a substance which possesses the power of lessening it in such an eminent degree as nitrite of amyl would probably produce the same effect, and might be repeated as often as necessary without detriment to the patient's health. On application to my friend Dr. Gamgee, he kindly furnished me with a supply of pure nitrite which he himself had made; and on proceeding to try it in the wards, with the sanction of the visiting physician, Dr. J. Hughes Bennett, my hopes were completely fulfilled. On pouring from five to ten drops of the nitrite on a cloth and giving it to the patient to inhale, the physiological action took place in from thirty to fifty seconds; and simultaneously with the flushing of the face the pain completely disappeared, and generally did not return till its wonted time next night. Occasionally it began to return about five minutes after its first disappearance; but on giving a few drops more it again disappeared, and did not return. On a few occasions I have found that while the pain disappeared from every other part of the chest, it remained persistent at a spot about two inches to the inside of the right nipple, and the action of the remedy had to be kept up for several minutes before this completely subsided. In almost all the other cases in which I have given it, as well as in those in which it has been tried by my friends, the pain has at once completely disappeared. In cases of aneurism, where the pain was constant, inhalation of the nitrite gave no relief, but where it was spasmodic or subject to occasional exacerbations, it either completely removed or greatly relieved it. It may be as well to note that in those cases in which it failed, small bleedings were likewise useless.

From observations during the attack, and from an examination of the numerous sphygmographic tracings taken while the patients were free from pain, while it was coming on, at its height, passing off under the influence of amyl, and again completely gone, I find that when the attack comes on gradually the pulse becomes smaller, and the arterial ten-

sion greater as the pain increases in severity. During the attack the breathing is quick, the pulse small and rapid, and the arterial tension high, owing, I believe, to contraction of the systemic capillaries. As the nitrite is inhaled the pulse becomes slower and fuller, the tension diminished, and the breathing less hurried. On those occasions when the pain returned after an interval of a few minutes, the pulse, though showing small tension remained small in volume, and not till the volume as well as the tension of the pulse, became normal, did I feel sure that the pain would not return.

As patients who suffer from angina are apt to become plethoric and greater relaxation of the vessels is then required before the tension is sufficiently lowered, I think it is advisable to take away a few ounces of blood every few weeks. When the remedy is used for a long time, the dose requires to be increased before the effect is produced. A less quantity is sufficient when it is used with a cone of blotting-paper, as recommended by Dr. Ricardson, and when it is poured on a large cloth. From its power of paralyzing both nerves and muscles, Dr. Richardson thinks it may prove useful in tetanus; and I believe that, by relaxing the spasm of the bronchial tubes, it might be very beneficial in spasmodic asthama. I have tried it in a case of epilepsy, but the duration of the fit seemed little affected by it. It produces relief in some kinds of headache, and in one of neuralgia of the scalp it relieved the severe shooting pain, though an aching feeling still remained.—Lancet.

#### ON THE USE OF SULPHITE OF SODA IN THE TREATMENT OF ERY-SIPELAS.

Dr. Addinell Hewson, of Philadelphia, stated that he had been using the solution of sulphite of soda as a local application in crysipelas, since February, 1864, and had obtained results from it, in the various forms of that disease, which were to him both interesting and surprising. He had been induced to try it from the representation made by Prof. Polli of its influence in destroying all disease of a cryptogamic or animalcular origin—a source to which recent researches would lead us to suppose crysipelas was due. At first he administered it internally, in doses of ten grains every two hours, as well as applied it locally; but the effects of the local use were so prompt and decided, that he has now abandoned its internal administration altogether. In extensive trials of this remedy, both in hospital and private practice, he has never seen it fail when thoroughly applied before the deep planes of cellular tissue had been invaded by the disease. Under the latter circumstance, no positive curative re-

sults were of course to be expected from its mere external use. But before such parts had become affected, a solution of ten grains of this salt to the ounce of water, when thoroughly applied on lint all over the surface affected, and to a considerable distance beyond it, and covered with oiled silk to prevent the evaporation of the solution, had not only produced a decided bleaching effect on the discolored surface in every such instance, in the first twenty-four hours of its use, but had invariably destroved all traces of the disease in forty-eight hours from its first application. The result was the same, whether the application was made in the traumatic or idiopathic form of the disease. He had thus cured twenty-seven cases, seven of which were of idiopathic erysipelas. Even in the cases where the deep planes of cellular tissue were involved, as well as the surface, the disease on the surface was always apparently affected by the application. It was most positively bleached in all instances, and in many was evidently destroyed, within the period above stated, even whilst that in the deeper parts proceeded on steadily to suppuration.— Trans. Coll. of Phys. of Philadelphia.

# Midwifery and Diseases of Women and Children.

CASE OF PURPURA HÆMORRHAGICA PRECEDING AND FOLLOWING LABOUR.

By J. A. Byrne, M. B., Professor of Midwifery in the Catholic University, Dublin; etc.

Read before the British Medical Association in August, 1867.

I had no intention until yesterday of reading any paper before the Obstetrical Section of the Association, as there appeared on the list so many interesting and important papers by many of our distinguished visitors, as well as by some of our residents; and as the discussion upon the several papers of necessity involved a good deal of delay, and was the means of eliciting considerable information. Dr. Barnes, however happening to speak to me of a recent case in which he had seen purpuric spots make their appearance soon after a labour in which the patient died, I thought that perhaps some of our visitors might have no objection to hear the history of a very rare case which occurred to me a few years since, in which purpura hæmorrhagica made its appearance some time before the termination of pregnancy, and continued up to the end of it, and finally caused the death of the patient.

CASE. Mrs. K., aged 30, married to her second husband, and having had previously, eight years before, one child, became pregnant, and en-

gaged me to attend upon her in her confinement, which she expected to take place in February, 1864. She had always enjoyed good health, although belonging to a delicate family, until shortly before she consulted me. She was then between seven and eight months advanced in pregnancy. She now began to suffer from debility, night-perspirations and an irritating cough. On examination, I could not discover any sign of phthisis; but I remarked some old cicatrices in the neck, evidently the remains of extensive cervical abscesses:

The lady lived about two miles from the city. I ordered her to the sea-side at Dalkey, and she soon recovered from the symptoms which I have mentioned. Contrary to my advice, however, she returned to town; and, on January 3rd, she told me that on the previous day an eruption had made its appearance over the body; that for a few days she had experienced slight febrile symptoms; and that then this eruption had appeared. On examining her, I perceived that all her chest, arms, and legs were covered with the well known spots of purpura, varying in size from a pin's point to a pea. She had also bleeding from the gums, which were very soft and spongy. I told her the nature of the ailment, and ordered her lime-juice, and put her upon a course of treatment and regimen suitable to this condition.

From this to January 14th, I saw her every day, and each day fresh eruptions of spots continued to appear; and the bleeding from the gums became very profuse. During the night, her mouth would become filled with blood; and this kept her constantly awake, as she feared to become suffocated. At this time, the appearance of the body was truly remarkable, being one mass of spots, of variable size and many shapes. Mr. John Hamilton saw her in consultation with me at this time; and on January 14th she was attacked by violent epistaxis, which reduced her strength so much, that the nares were obliged to be plugged. However, this appeared to turn the stream in another direction; for, on the following day, she began to pass blood from the bladder; and the quantity passed in this manner was enormous: in fact, the chamber utensil appeared to contain nothing but blood.

To restrain the hæmorrhage from the gums and kidneys, local application of gallic acid, ice, Ruspini's styptic, etc., were kept in constant use, whilst at the same time internal styptics and suitable regimen were given, After some days, the alarming hæmorrhage from the kidneys ceased; and although the gums still were tender and bled and the purpuric spots remained (not to so great an extent, however), she began to recover her strength to a considerable degree, and I ceased to see her for some days.

On February 5th, labour-pains set in, and she was delivered of a fe-

male child, after a short and easy labour. I need scarcely say to the gentlemen here assembled, that I took every precaution to guard against hæmorrhage, and was happy in my efforts, as she had none whatever from the commencement of her delivery to completion. She had no post partum hæmorrhage. The uterus contracted well, and remained so. She appeared to be gaining strength daily, and was to all appearance going on very well, when, on the 18th February—viz., on the thirteenth day after delivery—a discharge of blood took place from the vagina. At first, it was small; but soon the quantity increased, and, notwithstandthe administration of ergot, gallic acid, pressure applied to the region of the uterus, cold enemata, the tampon soaked in astringents, solution of pernitrate of iron, and ice, it continued; and the urine began at the time to exhibit a quantity of blood.

On February 23rd, Dr. Lyons saw her in consultation. Her condition was then the following. She lay in bed, prostrate; some fresh purpuric spots had come out upon the body; her gums discharged constantly and freely quantities of blood. The urine contained some blood, but not to so great an extent; and the discharge from the uterus was nearly abated. It was manifest now, however, that she must succumb to this long continued drain upon her system; she could not eat or drink anything, the taste of the blood secreted by the gums was so disagreeable; and, in fact, at this time she was so low that we were obliged to support her largely by brandy and nutritive enemata. Her pulse was scarcely perceptible; and she, in fact, presented all the symptoms and appearances of a person dying from gradual and continued bleeding.

Drs. Churchill and Lyons and Mr. Hamilton saw her repeatedly with me in consultation; but, notwithstanding all the skill and well directed efforts of these eminent physicians, she finally sank and died on the 29th February, fifty-five days from the first appearance of the purpuric spots.

—British Medical Journal.

#### TREATMENT OF CROUP.

Dr. E. Watson, of Glasgow, has an article on the treatment of the advanced stages of croup, in the Glasgow Medical Journal, from which we make the following extract:

"The topical application of solutions of the nitrate of silver, of gradually increasing strength, is a powerful reducer of the irritability of the glottis, but it requires far too much time for its action, even if it were otherwise suitable to cases of exudative inflammation, which I believe it is not. Emetics do certainly act on the glottis, and are such great helps in relaxing it, that they can never be dispensed with, but their operation

is only short-lived, and the patient would soon be exhausted by their very frequent employment. The inhalation of chloroform is perhaps the most speedy and powerful relaxer of the glottis at present known, and it may with caution be used in the cases to which I am now referring. It has this advantage, likewise, that its action may be maintained for a much longer time than that of those previously mentioned.

"A few weeks ago, a child of two years old was brought into one of my wards in the Infirmary, in the advanced stage of exudation croup. I thought he was suffering especially from spasm of the glottis, and had him put under the influence of chloroform, in which state his breathing became much fuller and more satisfactory, while both color and heat greatly improved. But the mother, terrified at some mention that had been made of an operation, would not consent to his remaining in the house, and in spite of all our remonstrances, took the child home that same day, I suppose to die- Another good relaxer of the glottis is hot water, with which the vinum belladonnæ may, I think, be usefully mixed, and the best way for applying it is by Stegle's atomizer. In this way the patient is made to inhale the mixture as a spray; and even if he be an infant, the air in his neighborhood may be so impregnated with the vapor that he cannot escape its action. I have seen much advantage from this appliance, both in croup and in other laryngeal states allied to it.

"These agents for relaxing the glottis have a double advantage; for they both gain time, which is so precious in these cases, and they may be alternated with other means, such as emetics, for the expulsion of the false membrane. They are the only relaxers of the glottis, of which I can at present speak from experience; but I do not doubt that when attention is fairly drawn to the subject, other agents will be discovered still more appropriate to the fulfilment of this important end. At all events, that is the direction in which our endeavors ought to point, if we are ever to be able to overcome this formidable feature of advanced croup.

"In those cases of the disease in which suffocation becomes imminent from the supervention of ædema of the aryteno-epiglottidean folds, tracheotomy is often performed, and were it not for the unsound state of the trachea, this would be a successful operation. Indeed, it will be found on a careful examination, that the most of those cases which are reported as successful performances of tracheotomy in croup are cases of ædema glottidis, often without a symptom of exudation at all, or in which the false membrane has been previously expelled, for ædema is apt to occur in the disease after the patient has struggled through its exudation stage. In such circumstances, the obstruction to respiration being at the glottis, tracheotomy relieves with certainty; but I repeat, that if the operation

be performed during the exudative inflammation of the trachea, the natural and ordinary result is aggravation of the morbid action, too often to a fatal extent. I also assert, with some confidence, that, in the vast majority of cases, cedema glottidis may be reduced without tracheotomy, by the timely employment of what I think more rational, and certainly much safer measures.

"Thus, for instance, I have in a good many cases of this kind successfully applied a strong solution of nitrate of silver to the œlemitous swellings by means of laryngeal sponge-probing, and, whenever this is rightly done, it will be found that there is an almost immediate transudation of serum from the tumor, whereby its bulk is diminished, and the air permitted to pass more easily through the glottis.

"If, however, the swelling does not yield to this application, or not with sufficient rapidity for the urgency of the case, there is another procedure of more speedy efficacy which should then be practiced. I refer to pricking or incising the elematous parts with the laryngeal lancet;—a measure which I can thoroughly recommend in suitable cases. In the performance of this little and almost bloodless operation the laryngoscope is not always available, either owing to the age or irritability of the patient; and, perhaps, in all cases, the best and safest way of performing it is to steady the tumor with the forefinger of the left hand, and tuen putting in the lancet, with its blade concealed till it touches the tip of the finger, to protrude the blade by means of the spring in the handle, and so to prick or incise the part as desired. This is not a difficult operation, and I am certain from my experience of it, that it gives relief to the breathing, both speedily and effectually, without incurring any of the dangers of tracheotomy.

"When this operation is required during the exudative stage of croup, I find it useful to follow it with an emetic, by which means all the loosened exudation is expelled, and the full amount of benefit ensured. Much has been said and written of the advantages of particular emetic medicines in croup. But I suppose that the essential quality, desirable in such cases, is speedy action, with as little as possible of depressing effect; and this is abundantly fulfilled by a combination of ipecacuanha powder with sulphate of zinc. In my practice I never prescribe the tartrate of antimony alone as a vomit, especially to a child, but I find that drug usefuin cases of croup in almost every stage, when given in small doses, of the wine for instance. I think its effect when thus administered, is chiefly that of soothing, and calling forth a natural moisture upon the lining of the wind-pipe. Since, moreover, the antimony is not used in these advanced cases for its depressing effect, it is not inconsistent to employ it

as I have described, while at the same time it may be necessary to support the patient's strength with soups, or even with wine. The inhalation of a spray of warm water from Siegle's atomizer, is often of essential service after lancing the cedematous aryteno-epiglottidean folds. The vapor just acts as a fomentation does to external parts, by soothing its irritability, and reducing congestion.

"In conclusion, I think I may re-state in brief terms, the practical results which, in my opinion, flow from the preceding consideration of this subject.

- "1. Tracheotomy should on no account be performed during the exudative stage of croup; for it is either useless in the worst cases, or positively hurtful in those where there is any hope of recovery.
- "2. In those cases of advanced croup, in which the spasmodically constricted glottis is the cause of immediate danger, our efforts should be directed towards its relaxation, for which purpose no very satisfactory means are as yet known to us, but perhaps the best are the inhalation of chloroform and the use of Siegle's atomizer, interrupted occasionally by the employment of an emetic.
- "3. In those cases in which ædema of the aryteno-epiglottidean folds is the proximate cause of impending apnœa, the swellings should be reduced by the topical application of strong solutions of nitrate of silver, or by the laryngeal lancet.
- "4. And lastly, the expulsion of the false membrane from the wind pipe, the performance of tracheotomy will very seldom be necessary; but if it is required from obstinate disease of the larynx, it will generally prove successful, in striking contrast to the sad results of the operation, when performed while the trachea is lined with exudation."—Glasgow Medical Journal.

#### PHOSPHATE OF SODA IN THE INTESTINAL TROUBLE OF CHILDREN.

Dr. WILLIAM STEPHENSON, Extra Physician to the Royal Hospital for Sick Children, reports in the *Edinburgh Journal* his success in using phosphate of soda in small doses in intestinal trouble. After a report of several cases, including jaundice, diarrhoea, dyspepsia etc., he concludes:

"In the selection of cases I trust I have shown that in this simple, inexpensive, and easily administered medicine, we have a remedy of much value. It may be given continuously to the youngest and most delicate children with perfect safety; and in so prescribing it, we are giving a salt of the greatest importance to the general economy when absorbed. It promotes a healthy secretion of bile, and of itself can aid in the assimilation of fatty matter. In regarding the cases where it is indicated, one cannot but be struck by the similarity which exists between its action and that often sought by the administration of gray powder "In alterative doses." As a rule for its prescription, I am in the habit of telling my students that whenever their minds suggest the ordering of hydrargy-rum c. creta as an alterative, they should try first the phosphate of soda. The advantage of the latter over the former, where it has to be continued for some time, is patent to every one. Where the purgative effect, however, is desired, the former is to be preferred, I hope therefore, that soon the use of the phosphate will displace in many cases the frequent and often long-continued use of the dangerous remedy.

"The cases in which I now recommend it are chiefly the following:

"In infants who are being artificially reared, and who are liable to frequent derangement of the bowels; also when the phosphatic elements in the food seem deficient, or when articles of food rich in phosphates, such as oat-meal, disagree; where from the character of the motions there is a deficient or defective secretion of bile. It is thus of service in cases on chalky stools or white fluid motions. I have also found it of service in many cases of green-stools. In diarrhea generally, it is more difficult to distinguish the class of cases. In simple diarrhea, such as we frequently meet with in the summer months, I have not found it of much service alone, although it may be of use when given in combination with other remedies. It is chiefly in that class of cases which are more properly termed duodenal dyspepsia that it is of benefit. Diarrhoea after weaning is generally of this nature, and the cases are often chronic, or of some weeks' standing, the mother generally having exhausted her own and the nearest druggist's resources before applying for advice. It is also of service in some cases where the diarrhoa is due to some general cachexia."

He also uses it with adults in some cases of constipation, and in cases of duodenal dyspepsia. He likens its action in phthisis to that of the hypophosphites of soda.

The dose for children is four to ten grains in the food, for adults, twenty to forty grains in water, and taken after meals.

CAVIALE'S COLLECTION OF CALCULI.—Not long before his death Caviale exhibited to the French Academy, his collection of urinary calculi, from 2700 patients operated on by him during the 43 years of his professional career. In 1600 of the number he had performed his favourite operation of Lithotrity.—Pacific Med. and Surg. Journal.

# Canada Medical Journal.

MONTREAL, APRIL, 1868.

#### SIR J. Y. SIMPSON ON THE LATE SIR DAVID BREWSTER.

We publish below a report of a meeting of the Royal Society of Edinburgh, taken from the *Scotsman*, in which will be found a most touching sketch of the life and untiring work of the late Sir David Brewster. It is worthy of careful perusal and will be found full of interest. We trust this memoire may stimulate those amongst us to follow in the wake of that great and good man. It is a duty of every scientific man to give to the world the results of his observations. We have the evidence before us that it was Sir David's habit to publish all observations of any value just as they occurred to him. From early life to the very last he was an observer, and even during failing health, at an advanced age, he made observations and had them recorded as they occurred.

His firm belief was in a future of unending happiness; his death bed was one of serenity and peace; and the song of the Royal psalmist seems to have been in him fulfilled, as he rested with child-like faith on the rod and staff which, in passing through the valley of the shadow of death, were to him comfort. Indeed we could almost imagine the visible presence of the Saviour of mankind at that last closing scene, pronouncing the sentence, "Well done, good and faithful servant, thou has been faithful over few things......enter thou into the joy of thy Lord."

The sixth ordinary meeting of the Royal Society was held last night in the Royal Institution—Professor Lyon Playfair, C. B., vice-president of the Society occupied the chair.

The Chairman said—Gentlemen, before beginning the business of this meeting, I wish to refer to the lamented death of two of the office-bearers of this Society. Dr. Burt, a member of our Council, was well known as a public spirited citizen, who has long usefully devoted himself to the development of our institutions, and who, by his genial disposition and honesty of character, endeared himself to all those who enjoyed his acquaintance. The other loss has had a more marked

relation to us, because in the death of Sir David Brewster this Society has lost its president, and this country one of her most distinguished This is not the time to refer to the benefits which Sir David Brewster has bestowed upon science. These have been so numerous and important that we may expect a special evening to be devoted to their consideration. If Professor Tait, who is so capable to do justice to the merits of his deceased friend, were to undertake this subject. I am sure the Royal Society would hail with pleasure the announcement of his intention. Such a record of the achievements of a great philosopher has a much higher purpose than that of an eloge, for while they become landmarks in the progress of science over new and and untrodden paths, they indicate the methods by which future progress is to be attained. Sir David Brewster entered this Society as long ago as 1808, and has been a constant contributor to its transactions. In announcing to us at the opening of the session the death of Faraday, he then said that there was only one person living who had, like Faraday, taken all the medals of the Royal Society of London-the Copley, the Rumford and Royal Medals. There is no one living now to claim this high honour, for the "one" so modestly hinted at was himself. In Brewster and Faraday the nation has suffered a heavy loss. Both were great philosophers and ardent Christians. We point to them as conclusive proofs that science and infidelity are not akin. I dare not trust myself to speak of the last days of Brewster. The perfect calmness and kindly consideration with which he wrote farewell letters to the public bodies, which had honoured themselves by honouring him during life, were perhaps to have been looked for in one who viewed death as a means of attaining a higher and purer knowledge of God and of His works. But it is given to few men to possess their mental faculties unclouded to the last. A week before his death I had a long letter in his own handwriting, showing the liveliest interest in the affairs of the University, and in some optical discoveries regarding which he frequently corresponded with me. A few days after, while his mind was still clear, but his bodily frame weaker, he dictated a letter to the Council of this Society, in which he took a touching leave of his old associates, and of the Society itself, and left to it, as a precious legacy, a research nearly completed, and which formed the death bed study of the old philosopher. I am sure that the Society would not have wished to commence the business of this evening without some allusion to the death of their venerated president, and without some expression of sympathy to his widow and family. I therefore invite, from the body of the Society, a resolution which will record the sense of our own sorrow, and of our

strong sympathy with that deeper personal affliction which is felt by the widow and children of so great and good a man.

Professor Sir James Simpson—It happens that I was the last Fellow of the Royal Society who conversed with Sir David Brewster before his death. Specially, I believe, on this account, I have been requested by the council to move a minute with reference to him. Most willingly do I comply with that request, and I beg therefore to move the following resolution of admiration for his genius and regret for his loss:—

The Royal Society of Edinburgh hereby record their deep sense of the great loss which the Society has sustained by the death of their late venerable and esteemed President, Sir David Brewster.

Early in life an earnest worker and a happy discoverer in some of the most recondite fields of physical knowledge, Sir David Brewster has, during the last sixty and more years, continued with ceaseless energy to pour into the contemporary stream of science and literature a series of contributions of rare excellence and originality. At last he has passed from among us as ripe in fame as in years; for he has reaped all the highest academic and other distinctions, both domestic and foreign, which a British philosopher can possibly win, and in his chosen departments of research he has left benind him no name more illustrious than his own.

The Society further resolve to send a copy of this minute to Lady Brewster and the other members of Sir David Brewster's family, at the same time expressing their sincere sympathy with them in their late bereavement.

Perhaps the Society will kindly bear with me while I venture to add to these resolutions a very few remarks. With you, Mr. President, I hope our colleague Professor Tait, will, at some early meeting, give us a full resumé of all the wondrous discoveries and inventions in science, and specially in optical science, which we owe to the genius and researches of Sir David Brewster. But permit me to make one or two observations on other matters, not scientific. As early as the age of twelve, Sir David became a student at the University, and he was still a student in every true sense of the term for the subsequent seventy-five years of his life. While yet only ten years old, he constructed a telescope (with his friend Mr. Veitch). significant of the chief future bent of his work and genius. Few men, we all know, have ever been more successful in unfolding and revealing some of the most hidden and obscure laws of science. His self-imposed task only ended with his life. And on the subject it seems to me that I carry almost a mission from him to usfrom the dead to the living; for when I last visited him at Allerly, when he was within a few hours of death, when he was already pulseless, his mind was perfectly entire, and perfectly composed; and on asking him, among other matters, if he wished any particular scientific friend to take charge of his remaining scientific papers and notes, he answered me,

"No, I have done what every scientific man should do-viz., published almost all my observations of any value, just as they have occurred." He then explained that he had left one paper on "Films" for the Society and then went on to express an earnest regret that he had not had time to write to the Society another description of the opitical phenomena which he had latterly observed in his own field of vision, where there was a partial degree of increasing amaurosis, which, he thought, might be yet found a common form of failure in the eyes of the aged. He described the appearance of this partial amaurosis minutely and energetically, telling me for your hearing that "the print of the Times newspaper had begun for a year or two past to look at one part in the field of vision as if the white interstices between the letters were lightly peppered over with minute dark powder;" and this amaurotic point was, he observed, latterly extending like the faint extending circle around a recent ink blot on blotting-paper. The clearness, vigour, and energy with which he detailed all this and more were amazing in one already so very weak, and so very near the last ebb of the tide of life. Then let me say further in relation to him as a philosopher that his death has broken several curious links with the past. For example, as I was told when down in that part of the country, he was the last of the stars that forty years ago dwelt on the banks of the Tweed, and formed the censtellation of friends that clustered there round the Great Wizard of the North at Abbotsford. In the first years of this century-1802-1803-he was much with Cavendish, connecting us thus with the grand band of philosophers who lived in the metropolis of England. Married to a daughter of Macpherson, he connected us with the time, more than a hundred years ago, when Johnson, Blair, Home, and others, disputed so acrimoniously as to whether Ossian's poems were true or not. I would make only one remark more. Professor Fraser told me this day what I have heard before with regard to his great precision, energy, and determination of thought-that during the seven years that he (Professor Fraser) was editor of the North British Review, Sir David Brewster contributed an article to every number; and that he did far more—that he stated the day when his first slip of paper would come, and the day when it would be finished. His manuscripts came as they were written -day after day, and sheet after sheet-and without the necessity of the revisal of those preceding. He thus worked with the precision and regularity of a mechanical rather than a mental machine. Sir David Brewster must have been originally endowed with a robust and iron con stitution. Few men ever reached the age of eighty-seven with an intellect so unimpaired and an ear so acute. In later years, however, he had

repeated attacks of serious illness. But since he attended the meeting of the British Association at Dundee in Autumn last, where he was carried out from one of its crowded meetings in a state of syncope, his health has rapidly declined. He died, ultimately, of an attack of pneumonia and bronchitis. A rigour, ushering in the fatal illness, occurred eight days previous to death. From the date of its occurrence he felt and stated that the grasp of the hand of death was now fixed upon him. Yet, though feeble and weak, he insisted on being allowed to rise and work for a few hours daily. Three days before he died, he insisted on dressing and going into his study, where he dictated several farewell letters, and amongst others, one to our secretary, Dr. Balfour. "Permit me," he pled with those around him, "permit me to rise once more, for I have work to do." "I know," he added, "it is the last time I shall ever be in my study." Towards the end of that day's work his friend and pastor, Mr. Cousin, visited him. "My race," said he to Mr. Cousin, "is now quite run. I am now no longer of use either to myself or to others, and I have no wish to linger longer here," "Yet," he added after a while, "Yet it is not without a wrench that one parts from all those he has loved so dearly," To Mr. Phin, and other clerical friends, he freely expressed in these his last days the unbounded and undoubting faith of a very humble and very happy Chris tian. No shadow of dubiety ever once seemed to cloud his mind. Like my former dear friend and old school companion, Professor John Reid he seemed to be impressed with the idea that one of the great joys and glories of Heaven would consist in the revelation of all the marvels and mysteries of creation and science by Him by whom " all things were made," and who, as Professor George Wilson held it, was not only the Head of the Church, but the Head and origin and source of all science. "I have," he remarked to me, "been infinitely happy here; but I soon shall be infinitely happier with my Saviour and Creator." As death drew more and more nigh, the one idea of his Saviour, and of his being speedily and eternally with Him, grew stronger and more absorbing. A near connection but not a relative, who in former years often lived in his house, and latterly formed one of the loving watchers by his deathbed, mentions this characteristic and striking anecdote:-" When we were living in his house at St. Andrew's twelve years ago, he was much occupied with the microscope, and, as was his custom always, he used to sit up studying it after the rest of the household had gone to bed. often crept back into the room on the pretence of having letters to write or something to finish, but just to watch him. After a little he would forget that I was there, and I have often seen him suddenly throw himself

back in his chair, lift up his hands, and exclaim, 'Good God! Good God! how marvellous are thy works." On Sunday morning I said to him that it had been given to him to show forth much of God's great and marvellous works; and he answered, "Yes, and I have found them to be great and marvellous, and I have felt them to be His." As a physician. I have often watched by the dying; but I have never seen a deathbed scene more full of pure love and faith than our late President's was. His deathbed was indeed a sermon of unapproachable eloquence and pathos. For there lay this grand and gifted old philosopher, this hoary, loving votary, and arch-priest of science, passing fearlessly through the valley of death, sustained and gladdened with the all-simple and allsufficient faith of a very child, and looking forward with unclouded intellect and bright and happy prospects to the mighty change that was about to carry him from time to eternity. I hope the Society will kindly excuse me if I have dwelt too long on the task which the Council have imposed upon me. May I be permitted to add one single remark more, Sir David Brester appears to have left for us all a strong and touching and marvellous lesson alike in his life and in his death. In his life he has shown us what a gifted and gigantic intellect can effect, when conjoined with industry and energy, in the way of unveiling and unfolding the secret laws and phenomena of nature. In his death he has shown us that one possessing an intellect so gifted and so gigantic could possess and lean upon the faith of a pure and simple hearted Christian. That faith made to him the dreaded darkness of the valley of death a serene scene of beauty and brightness. May God grant that it do so to every one of us. His spirit even now seems to me to be beckoning on the votaries of literature and science, here and elsewhere, along that path which he has so gloriously trod, upwards and heavenwards and Christwards.

Mr. David Stevenson, civil engineer, said—In common, I am sure with all now present, I have listened with great satisfaction to Sir James Simpson's beautiful notice of the late distinguished Principal of our University and President of our Society, whose numerous and valuable contributions to science and literature, during a lifetime remarkably prolonged, call not only for special acknowledgment in this Society, but demand the substantial recognition of his fellow countrymen. I most cordially concur in the sentiments that have been uttered, and especially in the feeling of sympathy that has been expressed for Lady Brewster and the other members of the family, in the bereavement which has taken place; and I have therefore to thank the Council of the Society for their considerate kindness in affording me the opportunity, which I cheerfully embrace, of seconding the motion which Sir James

has submitted to the meeting in terms at once so eloquent and so appropriate to the circumstances in which we are met together this evening. I am well aware that this is neither the time nor the place to refer to matters of a personal nature. But I am sure the Society will not accuse me of transgressing the bounds of strict propriety if I venture, in a single sentence, to add that, for myself and other members of my family who have, unfortunately, had occasion to differ from Sir David Brewster, it is my own, as I know it is their sincere desire, that in the grave which has closed over the veteran philosopher, all past animosities may not only be buried, but for ever forgotten. (Applause).

The resolution was unanimously adopted.—The Scotsman, February 18th.

#### THE CANADA JOURNAL OF DENTAL SCIENCE.

We have received a prospectus of a journal which is intended to be the organ of Dental Science and Art in Canada, and are gratified to observe a desire on the part of the dentists to establish a journal worthy of themselves and of their profession. There can be little doubt, that dentistry is a most important branch of the healing art. So much so that many of the schools in Great Britain are attaching to their corps of instruction teachers on this speciality.

The dentists of the Province of Ontario have recently formed themselves into an association, and obtained an act of incorporation from the Local Legislature. This association holds regular meetings and discusses subjects of practical interest to the profession. With a view of supplementing this important movement the projectors of the "Canada journal of Dental Science" are desirous of supplying a means of inter-communion which no foreign journal can be expected to supply. We trust this worthy undertaking will be well sustained, and that the Canada Journal of Dental Science will take rank amongst the leading periodical literature of the Dominion. The journal is to be under the editorial management of J. Stuart Scott, M. D., Cobourg, P. O., and of W. George Beers Esq., Montreal.

Campbell's Cod Liver Oil in combination with the Hypophosphites of Lime and Soda.

Dr. Francis Churchill proposed various preparations of Phosphorus with Lime and Soda as a remedy for tuberculous affections. The results of his observations were made known to the Imperial Academy of Paris as early as 1857 and are as follow:

- 1. The immediate cause, or at least an essential condition, of tubercular diathesis, is the diminution in the system of phosphorus in an oxydizable state.
- 2. The specific remedy for this disease is a preparation of phosphorus, easily absorbed and assimilated, and at the lowest possible degree of oxydation.
- 3. That preparation is found in the Hypophosphites, which are soluble and easily administered.

Messrs. Kenneth Campbell & Company of the Medical Hall Great St. James Street have succeeded in combining these remedies with pure Cod Liver Oil, in such a form as to be agreeable and easily taken. Each tablespoonful contains six grains of the combined salts. We would recommend a trial of this preparation in appropriate cases, as we have seen undoubted benefit derived from the use of the Hypophosphites, and the well known effects of Cod Liver Oil need no comment.

## Messrs. Kenneth Campbell & Co. Elixir of Calisaya, Iron and Bismuth.

We have received a specimen of this most elegant preparation from Messrs. Kenneth Campbell & Co., of the Medical Hall, Great St. James Street. It is a sufficient warranty of care in its preparation to know it hails from this old establishment: to our mind it is superior to the best of similarly prepared Elixir of Calisaya, which are so common just now. We recommend to our readers a trial of this elegant preparation; the dose is a teaspoonful three times a day.

### Compound Elixir of the Phosphates of Iron and Lime.

Messrs, John Rogers and Co., chemists and druggists, Great St. James Street, have forwarded to us a sample of their compound Elixir of the phosphates of Iron and Lime; a new preparation which they are just now introducing to the notice of the profession. It is an exceedingly elegant preparation, and in all cases of a scrofulous tendency much benefit may we believe be derived from its administration; indeed it has been already used with excellent results by several of the profession in Montreal. The introduction of the phosphate of lime renders it doubly valuable; for with the exception of the chemical food we have no ferugenous remedy which contains it. We believe that upon trial it will answer every expectation.

#### AMERICAN MEDICAL ASSOCIATION.

Office of Permanent Secretary. W. B. Atkinson, M.D., S. W. Corner Broad and Pine Sts., Philadelphia.

The Nineteenth Annual Meeting of the American Medical Association will be held in Washington, on Tuesday, May 5th, 1868, at 11 o'clock A. M; the following Committees are expected to report: -On Ophthalmology, Dr. Jos. S. Hildreth, Illinois, Chairman; on Cultivation of the Cinchona Tree, Dr. J. M. Toner, D. C., Chairman. On Surgical Diseases of Women, Dr. Theophilus Parvin, Ind., Chairman. On Rank of Medical Men in the Navy, Dr. N. S. Davis, Ill., Chairman. On Insanity, Dr. C. A. Lee, N. Y., Chairman. On American Medical Necrology, Dr. C. C. Cox, Md., Chairman. On Leakage of Gas-Pipes, Dr. J. C. Draper, N. Y., Chairman. On Medical Ethics, Chairman. On Plan or Organization, Dr. C. C. Cox, Md., Chairman, On Provision for the Insane, Dr. C. A. Lee, N. Y., Chairman. On the Climatology and Epidemics of Maine, Dr. J. C. Weston, of New Hampshire, Dr. P. A. Stackpole; Vermont, Dr. Henry Janes: Massachusetts, Dr. Alfred C. Garratt; Rhode Island, Dr. C. W. Parsons; Connecticut, Dr. E. K. Hunt; New York, Dr. W. F. Thoms; New Jersey, Dr. Ezra M. Hunt; Pennsylvania, Dr. D. F. Condie; Maryland, Dr. O. S. Mahon; Georgia, Juriah Harriss; Missouri, Dr. Geo. Engelman; Alabama, Dr. R. Miller; Texas, Dr. T. J. Heard; Illinois, Dr. R. C. Hamil; Indiana, Dr. J. F. Hibberd; District of Columbia, Dr. T. Antisell; Iowa, Dr. J. W. H. Baker; Michigan, Dr. Abm. Sager; Ohio, Dr. J. W. Russell; California, Dr. F. W. Hatch; Tennessee, Dr. Joseph Jenes; West Virginia, Dr. E. A. Hildreth; Minnesota, Dr. Samuel Willey. On Clinical Thermometry in Diphtheria, Dr. Jos. G. Richardson, N. Y., Chairman. On the Treatment of Disease by Atomized Substances, Dr. A. G. Field, Iowa, Chairman. On the Ligation of Arteries, Dr. Benj. Howard, N. Y., Chairman. On the Treatment of Club-Foot without Tenotomy L. A. Sayer, N. Y., Chairman. On the Radical Cure of Hernia, Dr. G. C. Blackman, Ohio, Chairman. On Operations for Hare-Lip, Dr. Hammer, Mo., Chairman. On Errors of Diagnosis in Abdominal Tumors, Dr. G. C. E. Weber, Ohio, Chairman. On Prize Essays, Dr. Chas. Woodward, Ohio, Chairman. On Medical Education, Dr. A. B. Palmer, Mich., Chairman. On Medical Literature, Dr. Geo. Mendenhall, Ohio, Chairman. Secretaries of all medical organizations are requested to forward lists of their Delegates as soon as elected, to the Permanent Secretary, W. B. Atkinson.

### CANADA

# MEDICAL JOURNAL

#### ORIGINAL COMMUNICATIONS.

Valedictory Address to the Graduation class in Medicine and Surgery McGill University. Delivered on behalf of the Medical Faculty, at the Annual Convocation held in the William Molson Hall of the University, on the 2nd May, 1868. By WILLIAM WRIGHT, M.D., L.R.C.S., Edin., Professor of Materia Medica, &c.

#### GENTLEMEN GRADUATES:

Allow me to rejoice with you at having obtained the "summos honores" in medicine this University can grant. After years of patient husbandry, the seed has sprung up, and this day these honores, as its flowers, bloom upon your brows. May they long charm you—may the beautiful wreath ever sit lightly upon your conscience,—and may their fragrance be breathed into your heart to enlist at all times your most active sympathies. If it be your happy life to experience these good wishes,—then the object for which these honores have been awar led will be attained, and useful fruit succeed the flowers,—then you will be constrained to love your profession, to practice it so as to have a conscience void of offence, and to afford the calls of disease or accident the best aid the present state of art can afford.

To develope this fruit, the cells of the "Mens Medica" must be thoroughly furnished with stores of adequate knowledge. Hold a review from time to time of your past acquirements, inspect the forces under your command, keep the whole in proper discipline, and watch the gates of the garrison, that none desert. Without some such care, learning will disappear, and your past labour be in vain. It is true, your books are at home open to perusal,—but the practitioner must needs be a ready man. By no one else is a retentive available memory more required. Called upon in emergencies most urgent, where no delay can be brooked,

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—he cannot leave his patient, nor say, "I must first return to my library and look up Reynolds' System or Holmes' before I can tell you what to do,"—no! be his competency what it may, he must fall back on the resources he then has and at once do all in his power. The bleeding wound will not staunch its flow till he leaves to find out how the severed artery should be tied, nor will the deadly poison stop its destructive work till he consults his notes to be sure of the proper antidote to exhibit.

Be not content with living in the past. Medicine is progressive, and unless pace be kept with its rapid strides, those who halt or lag behind will be soon outstripped. The charge that medicine is a venerable fossil, consolidated in the stillness of by-gone ages, is contradicted by the experience of every year. Take up any of the periodical abstracts or retrospects, which I advise each of you to procure regularly, and there in the new things brought to light, abundant evidence will be found to rebut the aspersion. Turn over the leaves of comparatively modern volumes and note the improvements, many and important, that have been introduced. Note the deeper insight into the construction of the organism afforded by Histology. Note the increasing facilities for diagnosis in the invention of ingenuous instruments, as the Laryngoscope. Note the contributions to the Therapeutical staff, as Chloroform or Carbolic acid. Note in treatment the tendency rather to conserve and recuperate than to pull down and impoverish. Note the operative procedures that have made familiar as household words, the names of Graeffe, Syme, Bellingham, Simpson, Teale, Sims, Bowman, Holt and others. Note these alone, and surely they are sufficient to disprove the stagnancy of our art; surely as earnests of further advances, they are sufficient to impel onward whoever would be thoroughly proficient.

Another work lies before you, different to any hitherto considered. Heretofore you have been under the nurture of professors who have directed you through the proper course of study, and in regular order spread before you repasts of the necessary subjects. Henceforth you will have to forage and cull and elaborate for yourselves. While in apron-strings you have been feeding upon the mental capital of others, but now the strings are cut you will not only have to instruct yourselves, but what is much harder you will have to learn how to apply your knowledge. Knowledge to be practically serviceable must be transmuted into power; and when employed so as to y eld profitable results, implies skill or tact. That this may be shewn in the cases committed to your care, investigate rigorously their intrinsic phenomena;—by well balanced comparisons, separate their probable fallacies;—and frame exact combinations of their lead-

ing circumstances. Shrink not from the spectres this may call up of toil and trouble and uneasiness,—but persevere. "Perge et prospera." The requirements of skill are the essentials of correct judgment. In its exercise, celerity will increase with every trial, and time will bring experience, One is the secret of the other, experience of celerity. As patient after patient troops before a skilled practitioner, and in a few minutes, it may be in the twinkling of an eye, he can sometimes tell the disease of each, and has the remedy on the tip of his tongue;—imagine not that this is merely guess work, or the play of the empiric, or a sleight of magic, much less intuition. Well earned experience has won the victory of this celerity and resolved the work of hours into the work of seconds.

Furthermore, as you labour, think not all around is beaten ground. If, as was said, Medicine be progressive, it must be incomplete. Though there is much ascertained—yet to the paths over which you may walk, there are limits Much you can observe, comprehend and define; much you can infer, predict and be sure of;—but there is also beyond, a wilderness that waits to be cleared and made to blossom. Would you contribute to lend a helping hand to aid in achieving so desirable an object as this, as the perfection of our science;—the distinction is open to you, in common with others, and if the task be addressed with untiring energy and indomitable perseverance, you will at least be worthy to emulate the fame your predecessors have attained in their career, and to be gathered in the role of those who have enlarged the boundaries of Medicine, or reclaimed its unexplored wilderness of hidden truth.

In thus seeking to be the "wise Physician skilled to heal," and to be "more than armies to the public weal," neither refrain to cultivate whatever else may ennoble humanity, nor neglect the things needful to elevate refined taste,-to inform aright the mind,-and to sublime the heart's affections. The wisest, the most skilful of our Profession, are likewise examples of men of general information, deep learning, and high accomplishments. To the peculiar nature of a Physician's life these are most agreeable. Introduced into the lordly mansion as well as the humblest hut,-holding intercourse with very gifted minds, reaching the ear of the most polished, -side by side with some whose talk is of the most lofty themes. -his patient, it may be, a scholar, a statesman, or a poet-thus favourably circumstanced in his round of daily calls—the Physician who can contribute most to the mutual entertainment, in being adapted to respond by congenial disposition, or requirements, or manners, is but affording, in return, a measure for the culture by which he is welcomed and addressed. Thus it was with Darwin by his poetic charms, with Gregory by his classic scholarship, with Abererombie by his profound philosophy, and with hosts of others, all of whom while stars in the Medical firmament, were fitted to be of other spheres as well--ornaments most brilliant.

And while you are gathering the fruit of your labors, I entreat you to be distinguished by regarding yourselves as under Physicians of the great Physician, entrusted with the talent of healing, that for him you may banish pain, reinstate health, and allay the ills to which flesh is heir. By the light that streams from the pure fountain of Him, who is great and good, reflect the image of the great and good. In every visit paid, in every advice given, in every office rendered, let nothing arise to blur or stain that image. Preserve unbroken the oath to act "caute. caste et probe." Be true to your solemn vow by rendering your services cautiously, virtuously and honestly; with prudence, chastity and integrity; wisely, soberly and honourably. Pursue a straight course through life; a crooked wily policy is so deceitful that it must involve enmity to others: let your course be fair, open, above board; one in the grass may be very plausible, overlaid with fair surface leaves of pretension, but the snake's head cannot be always concealed, and whenever it shoots up will be hated: let your course be one that defrauds not another, run parallel to what is just and fraternal; parallel lines never cross each others path, nor trespass on pre-occupied ground: let your course be as narrow as truth; never widen your line of action by burrowing or undermining, never slander nor depreciate nor steal another's name or fame: and let your course be adorned by modesty; a line of self assertion, pedantic or quack-like, strongly marked by the letter I, is too puffed up, too full of vaunting to be one of charity.

Before you bid adieu to your Alma Mater, let me ask you to remember her when it is well with you. Remember whatever the sacrifice or exertion has been on behalf of her graduates, it is because of her solicitude for their character or efficiency. Because of this, the requirements. exacted of applicants for her degrees, are distated and enforced. For this, they must reach her standard, who go forth from her halls as duly qualified Physicians; and on account of this, she cherishes her offspring to supply communities with Practitioners, in whom, while discharging their responsible duties, she can have full confidence. As identified with her, as her exponents, it should be your care to preserve that proficiency, to maintain that standard, and not weaken or outrage that confidence. It has never been the endeavour of this school to lower the scale of medical excellence, nor to procure students by unworthy artifices, nor to set forth pretensions that could never be made good, nor to facilitate the passing of utterly incompetent candidates; instead of such sordid, selfish motives, principles have been built upon another foundation,-compact, enduring

and unexceptionable,—to ensure, when carried out, a character for her graduates of such lustre of eminence, that they may win the esteem, merit brings its own reward. As her representatives, loose not that merit;—and when scattered broadcast, throughout the provinces of this great Dominion, may neither you nor any of her graduates fail to be worthy scions of this University;—may none tarnish her great principles of general usefulness and special proficiency;—and may none fail to attain to the joy, outspread before them, in gleaning harvests of justly earned prosperity.

Fnally my friends, I commend you to the Great Physician. May you grow up by his side as His peculiar delight;—may the light that fell upon His path, as He went about doing good, guide your feet;—and may your secure defence be the feathers of His Almighty wings.

Case of Poisoning by Stramonium Datura,—Recovery. By D. McGillivray, M.D., Attending Physician to the Ottawa General Protestant Hospital.

On the 17th Oct. last I was summoned in haste to visit a child named Denmark. I instantly obeyed the call, and upon entering the house found the little sufferer lying prostrate and helpless on his mother's knees. He was a fat, stout child, two years and three months old, and had always enjoyed good health. I at once suspected poisoning from the symtoms present, and having made enquiries about what he had taken, I was handed a portion of the pod or fruit of the Thorn Apple which he had found in the garden, and of which he had eaten freely about an hour before. This at once revealed the cause of the mischief. The following symptoms were clearly noticeable: Pulse 85, very weak; eyes open, pupils dilated to the utmost; face and neck flushed and greatly swelled; head moderately warm; lower extremities flushed and very warm; this redness was more marked in the anterior region of the thighs; he appeared very restless and agitated, stretching bimself at full length, throwing his arms and legs about, and sometimes seizing his neck with both hands; would not answer questions; vision imperfect; voice weak; could swallow water, but with great difficulty; tongue and fauces dry and slightly swelled; perspiration copious; nausea and retching.

Treatment:—I immediately administered tartar emetic and vin ipecac which induced free emesis in about a quarter of an hour. I may here mention that in the matters vomited I counted seventy-six seeds, with

portions of the fruit of the Thorn Apple. As soon as the vomiting ceased ordered brandy and water—a teaspoonful of each every half hour, and as the child appeared to be very thirsty, I ordered a strong decoction of green tea to be made and given as a drink every two hours, or oftener if required. This treatment was continued for five hours, when the symptoms began to abate. Pulse fuller and stronger, no alteration in its frequency; face less flushed and swelled; lower extremities warm; less redness of skin below the knees; voice louder; swallows better; less nervous agitation; skin of body moist and warm. It being at this time 11 o'clock at night, I told the mother to pursue the same treatment, to give the brandy and tea at longer intervals, and give three teaspoonfuls of castor oil.

18th. I found him decidedly better, very easy and quiet, and strongly inclined to sleep; will answer questions; voice stronger; swelling and redness of neck and face entirely disappeared; uo redness of lower extremities; is able to walk; pupils partially dilated; complained of headache; during the night had little sleep; bowels relaxed; passes urine freely; pulse 80, no inclination to eat any food; still thirsty; ordered the brandy to be discontinued and to give the tea as often as required.

19th. Is convalescent and doing well; slept well during the night; appetite good; bowels regular; pulse regular, 80; pupils not over-dilated. Evening—Appears quite well and walking about.

Ottawa, March 23rd, 1868.

Talipes Equinus acquisitus; patient 25 years of age; Division of Tendo-achillis and aponeurosis plantaris. By J. A. GRANT, M.D., M.P., F.R.C.S.. Edinburgh, &c.

G. S. Boulton, aged 25 years, entered the General Protestant Hospital, May 10th, 1867, with a deformed foot. On examination, various sinuses were observed on the dorsum, from which there was a puriform discharge, and attended by more or less pain on pressure. This state of the parts existed for a period of fully twelve years, and gradually resulted in increased deformity of the foot, atrophy of the limb with a well marked disposition to general constitutional debility. The periosteum of the tarsus was not denuded at any point, but the surrounding structures yielded readily to the probe. Pressure being removed and the parts subjected to treatment, the sinuses closed and the skin and subjacent cellular tissue in a few weeks resumed a healthy tone. This condition being established, the deformity of the foot was subjected to treatment.

The subjoined wood cuts give a better idea of the abnormal and the normal, than any description could convey. The bones of the foot, not even those of the toes excepted, were almost immovable in this position, and the patient had not the slightest control over any joint of the foot. He touched the ground partly on the side, but principally on the dorsum of the foot; however, owing to pain on pressure, and the profuse and continuous discharge, he was obliged to dispense with his heavy boot, and have recourse to crutches. To walk without such support was out of the question, and so troublesome had the foot become, that the patient desired amputation of the limb.



June 4th, 1867:—On consultation with the Hospital Staff, the tendoachillis and aponeurosis plantaris were divided. On the sixth day afterwards, the external wounds having closed perfectly, extension was commenced and gradually increased. In order to facilitate extension, a splint 18 inches in length and 3 in breadth was placed on the sole of the foot and retained in position by a bandage, leaving one end of the splint to project several inches beyond the ball of the toe. A second splint two and a half feet in length, was used as a lever, the one end being held in position by a strap passed around the projecting portion of the splin attached to the sole. A good thick pad placed on the dorsum of the

foot was used as a fulcrum, and thus extension was gradually continued until the various fibrous bands gave way, and the foot after twelve weeks recovered the normal position, not even requiring the division of the numerous fibrous bands, which contrary to expectation yielded to exten-



sion alone. The patient was discharged, and the limb gradually recovered its power, and the foot its strength, so much so, that in three months afterwards he could walk three miles without difficulty, only using a small stick. At present he enjoys excellent health, wears a regularly made boot, and walks perfectly free from any apparent abnormality whatever.

Case of Tumour of the Uterus. Removal with the Ligature. By Thos. Simpson, M. D., Manitowaning.

In looking over my notes lately, it occurred to me that a brief report of this case might interest some of the readers of this Journal, as showing the straits to which surgeons practising in remote and isolated parts of the country, are sometimes driven—as well as from its value as a specimen of disease.

Nov. 27th, 1862. Called to see Mrs. C——a halfbreed, aged 54, the mother of eleven children—the youngest 11 years of age. Found her in bed, emaciated, anæmic, restless and feverish, with quick, small pulse; pain in the abdomen increased by pressure; bearing down and a sense of dragging. Complains of great pain in the vagina. Upon examina-

tion, found a part of a large tumour protruding, at once suggesting inversion; a closer inspection soon determined its character. In shape irregularly ovate; of a dark purplish colour; elastic and firm; covered by a smooth, thin membrane; without sensation, and attached to the uterus, at a short distance above the os, by a peduncle of about an inch in diameter. The os was flaccid and dilatable—resembling the state of that part immediately after the expulsion of the child in natural labour—and was dragged down some distance into the vagina.

Mrs. C——has suffered for over four years, from constant floodings and occasional bearing-down pains, which she ascribed to falling of the womb. Throughout the past month she has been confined to bed, owing to weakness and frequent pains resembling severe labour pains. It was during one of these pains, this morning, that the greater part of the tumour was expelled.

28th. The opium, warm formentations, &c., ordered yesterday, have afforded material relief; there is still a considerable amount of pain and restlessness. Proceeded to remove the tumour by means of the ligature. Having none of the ordinary appliances, the wooden stem of a meerschaum pipe, a common trowser's button, and a piece of whipcord, supplied the place of a silver canula, or other recognized instrument. The two ends of the cord were passed through the tube, leaving a double noose, which was slipped around the neck of the tumour; the ends of the cord were then firmly tied, first passing through the button. The ligature was tightened daily, and the tumour separated on the sixth day. There was no hæmorrhage. Mrs. C——recovered rapidly. The menses appeared at the end of the month; and she reported one year afterwards—at which time I lost sight of her—that she had menstruated regularly since, and was in perfect health. The tumour was fibrous, dense and elastic, and weighed five pounds.

On Disorders of the Functions of the Stomach, from Sympathy with the Uterine Organs. By Alex. McMaster, M.D., Ontario.

In the so called functional diseases of the stomach, chemistry has done much to elucidate that which was obscure, and no doubt will do much yet to clear up those pathological changes which take place as a result of disease, whether functional or organic; yet there can be no doubt but we must look to the investigations of the physiologist for an explanation of the various morbid phenomena which take place, in consequence of the sympathetic connection of the semilunar ganglia with the sympathetic nerve.

That there is a very great sympathy between the various organs is sufficiently obvious to the commonest observer, but to what extent it is capable of being diffused, still remains a matter of conjecture. We have ample evidence of this in the action of vomiting, which takes place during the passage of renal calculi, and under various other disturbances, and disorders of the genito-urinary organs, pointing directly to the relation between the special ganglia of the stomach, and those of the later organs. The extraordinary variations of the heart under the influence of gastric causes—the intermissions of pulse and the palpitations which a little flatus at the cardia will produce, the intense sedative influence on the circulation by the application of cold to the stomach, illustrate in a special manner the diffusion of sympathy from the abdominal to the thoracic ganglia. The stomach and uterus manifest the most intimate nervous relations, as we see daily exemplified in the disturbance of the functions of the stomach during the period of utero-gestation. The same is equally true when taken in connection with the numerous morbid conditions of the uterus; especially those which affect the interior structure and interfere with the proper performance of its peculiar functions, and when such pathological conditions have existed for a length of time, they produce various painful affections of the stomach, often demanding for their relief special treatment. These disorders are not confined to any particular time of life, affecting equally young females with those whose period of uterine activity is drawing to a close; persons of a nervous temperament would seem to be more frequently subjects of these affections than those of a more luco-phegmatic; they come on gradually, commencing often with a slight tenderness in the epigastric region, to which is added occasional attacks of severe pain, which last, at first, but for a moment, leaving the patient with a feeling of sinking and depression, which passes away after a time, to return again after an indefinite period. Sometimes there is vomiting during the paroxysm, consisting of the ordinary mucous of the stomach and fauces; when the disease has been of long standing, the paroxysms recur more frequently and are of a more severe character; the matters vomited often contain unmistakeable evidence of homorrhage, generally from follicular congestion of the mucous membrane, and probably sometimes from erosion—the pain in the epigastrium being much moresevere and of longer duration; the bowels are generally constipated; the tongue is large and flabby, and frequently covered with a thin, white fur; there is great tenderness over the epigastric region, the pain produced often shooting up into the precordial; the skin assumes a dirty mottled hue; sometimes the attack is preceded by a sensation of chilliness and depression; the urine becomes dark coloured and frothy, emitting an

odour not unlike stale fish, and after standing some time, throws down an abundant phosphatic deposit, which condition is mainly due to a loss of nerve power in the bladder, with irritation reflected from the uterus, both organs being largely supplied from the nerves of organic life.

These morbidd phenomena are primarily produced by reflex action from the uterus to the stomach and other organs, and that after continuing for some time, produce congestion and, it may be ulceration of the mucous membranes investing them, analogous to that which takes place in severe cases of neuralgia, which after having continued for an indefinite period, produces extreme sensibility of the parts, and more or less tumefaction, resulting from effusion into the cellular tissue; occasionally these cases become so far the predominating difficulty, that the uterine becomes lost, and hence their frequent recurrence after medical treatment, which will be made sufficiently obvious by stating the following case.

Mrs. Murray, æt 45. tall, muscular woman, and mother of ten children; has had good health until these last 7 years, when she had a miscarriage at the third month of utero-gestation. It would appear that she had an attack of metretis at this time, from which she never (to use her own phrase) got over, some time after this she began to experience severe pains and soreness in the region of the stomach, which finally became so distressing that she applied for advice, from which, however, she derived very little benefit. She continued to get worse until the 4th of March, 1868, when she was suddenly seized with violent pain in the epigastrium, extending to the precordial region and up into the left shoulder; also vomiting of a dark grumous fluid at intervals; extreme tenderness on pressure over the stomach and also over the dorsal region; complains, also, of pain in the back, across the hips and down the thighs, with a frequent desire to micturate; pulse full and soft. She was ordered to take five grains of ox. cerium every four hours, and region of the stomach to be rubbed with ol. tiglii morning and evening, until a copious eruption was produced. 5th. Vomiting and pain have been much relieved, no effect from the ol. tig. tenderness still remains; bowels have not acted for four days; ordered an injection of warm soap and water, with ol Ricini 3 ij ol Terebinth 3 i; a large quantity of dark hardered foces came away, giving considerable relief to the feeling of distention experienced in the abdomen; to continue the cerium. 6th Vomiting and pain have ceased; considerable prostration; tongue large and flabby, and covered with a slimy mucus; countenance haggard, and the skin of a dingy hue; the ol. tig has produced a copious eruption, with a marked diminution of the tenderness; ordered to take beef tea and new milk, with the addition of a little wine; learn to day that the function of menstruation has been very irregular and scanty since her previous illness; has only menstruated twice during the last six months.

9th March. Improved since last visit, countenance more cheerful; feels no uneasinss about the stomach; has some desire for food; still complains of weakness and languor; ordered to take Ferri ammon citgrs iij in  $\frac{7}{5}$  ss liq. cinch. three times a day. 14th. Expresses herself better than she has been for a long time. So far as I know the ox cerium is the remedy from which the greatest amount of benefit is to be derived in these cases, the intense pain being sometimes relieved as if by magic; the local application of croton oil seems to produce less irritation than blistering, the only objection to its use is its propensity to spread.

## REVIEWS AND NOTICES OF BOOKS.

A Practical Treatise on the Diseases of Women. By T. GAILLARD THOMAS, M. D., Professor of Obstetrics in the College of Physicians, New York: Philadelphia, Henry C. Lea. Montreal, Dawson Brothers. 1868

The increased attention which has within the past ten years been given to diseases peculiar to the female sex, has been the means of largely increasing our literature on the subject. The work now before us is the last addition we have had, and although its author's name has not been widely known—and this is his first effort—we venture to assert that he has produced a volume of exceeding merit. It is not faultless we admit, yet taking everything into consideration it is a fair exposition of the science of medicine as applicable to diseases peculiar to the female. The first chapter is devoted to an historical sketch of uterine pathology, and although not lengthy it gives an interesting outline of the part occupied by the ancients, in founding specialities, but of course more particularly that speciality which the author writes upon. He names Hippocrates as the founder of literature on gynecology, having written three volumes on female diseases; also that Galen and Celsus, devoted some of their writings to the same subject. With the exception of a jump from the second to the sixth century, the history is carefully brought down to the present day. The second chapter refers to the etiology of uterine diseases in America. Dr. Thomas cleverly evades asserting directly the fearful prevalence of uterine diseases in the United States, assigning as a reason, his inability to make a comparison owing to the absence of statistical information. He refers, however, to the deterioration of the female sex in America, which he believes to be due to a variety of causes, such as, want of fresh air and exercise, imprudence during menstruation, prevention of conception and induction of abortion and excessive develop-

ment of the nervous system. This portion of the chapter contains much sound sense, and we believe also much truth, but we can hardly agree with him when he says "if properly developed and placed beyond causes which militate against her physical well being, the human female would be in no great degree the inferior of the male." While we firmly believe that many of the customs of fashionable life, do much to deteriorate the female (and in some degree the male also) we believe that Providence always intended her to be the weaker vessel, and in physical endurance to be much below the male. Dr. Thomas' remarks on abortion gives us something of an insight into the appalling iniquity of New York. Chapter six is on the peculiar hyperasthetic condition of the mucus membrane of the vagina, which Dr. Marion Sims, has called vaginismus, and our author considers it to be a much more prevalent affection, than most practitioners think. In the matter of treatment he offers nothing new, simply giving that recomended by Dr. Sims, and by Dr. Burns of Glasgow, who was by the way the first person who drew attention to this peculiar condition of the vagina: chapter twelve on inflammation of the uterus, contains very much that is valuable in a remarkably concise manner, and the same may be said of several of the following chapters on metritis, endo-metritis &c, The chapter on ovariotomy, has an illustration of Dr. Storrer's clamp shield, similar to one which appeared recently in this Journal. The style of Dr. Thomas commends itself at once to the reader, as being peculiarly clear and practical. We consider the volume does its author much credit.

Hufelands Art of Prolonging Life. Edited by Erasmus Wilson, F.R.S., from the last London Edition. Philadelphia: Lindsay & Blakiston. Montreal: Dawson Brothers. 1868.

This little work although written nearly seventy years ago, contains truths which are quite as applicable now as then. Its author was a philosopher as well as a Physician, and occupied the post of Professor of Medicine in the University of Jena. On its publication it seems to have met with much success throughout Germany, and a translation into English was issued in London, but the Edition, which was a small one, was soon exhausted. Dr. Erasmus Wilson, a name familiar to all, feeling convinced that such a volume was calculated to do much good, has edited the present issue. Dr. Wilson in his preface remarks "that he has been struck with the little real progress made during more than half a century in the science of living." The work opens by a brief history of the means which the ancients, especially the Egyptians, Greeks

and Romans, used to prolong life. The Egyptians believed in Emetics twice a month; hence among them it was common as a Salutation to say "how do you perspire." Chapter five is on the duration of Human life, and contains a variety of valuable information. In this section Professor Hufeland has grouped together the most remarkable instances among mankind of the highest ages attained. The work is written for general circulation, and we believe that could it get a large distribution much good would ensue, for who does not wish to prolong life.

Lectures on Orthopedic Surgery. Delivered at the Brooklyn Medical and Surgical Institute, By Louis Bauer, M.D., M.R.C.S., Eng. Professor of anatomy and clinical surgery, &c., &., Second Edition revised and augmented with eighty-four illustrations, 8vo., pp. 336. New York: William Wood & Co Publishers, 61 Walker Street. 1868.

This handsome volume has just reached us, through the courtesy of the publishers.

The very fact that Wm. Wood & Co., have undertaken the publication of this work, is in itself a strong recommendation of its literary value, for this tirm is known to be rather fastidious in the choice of authors. However, there was no necessity for this additional prop, inasmuch as the author's literary reputation is fully established and professionally appreciated.

Most of our readers are familiar with the first edition of this work and it is not necessary to offer any detailed criticism on the new edition. Suffice it to say that the latter is a decided improvement on the former, not only in appearance and size, but in its professional merits.

The subjects of Rachitis, Joint Diseases, with its incidental deformities, essential paralysis, and Progressive Muscular Atrophy, have been superadded, and the work has thus been enlarged to 336 pages.

Most of the old wood cuts have been replaced by new and superior ones, and others are introduced to exemplify the pathology and treatment of joint diseases.

It is impossible for us to pronounce a more appropriate euology on this work, than has lately been done by Lewis A. Sayre, Professor of Orthopedic Surgery, at Bellevue Medical College, in his late introductory lecture to his class.\*\*

<sup>\*</sup>Moorhead, Simpson, and Bond, New York, 1868.

"Professor Louis Bauer, of Brooklyn, a German Surgeon of very scientific attainments, with an energy that knows no limit, has devoted himself almost exclusively to this department of surgery. In fact the professional mind of this country has been attracted to this particular branch of surgery, through the various articles of this able author in the different medical periodicals, more than from any other source, and his lectures on this subject, are a very valuable contribution to Orthopedic literature.

### PERISCOPIC DEPARTMENT.

# Surgery.

ILLUSTRATIONS OF THE ANTISEPTIC PRINCIPLE OF TREATMENT IN SURGERY.

By James Syme, F. R. S. E., Surgeon to the Queen in Scotland; Prof. of Clin. Surgery Univ. Edinb.; etc.

[British Medical Journal, January 4, 1868.]

The following cases of wounds, compound fractures, and abscesses, selected from those that have been treated under my care in the clinical surgical wards of the Royal Infirmary, will, I hope, tend to illustrate and recommend the antiseptic principles of practice introduced by Mr. Lister, which although of the greatest value, there is reason to fear are not yet generally understood or adopted. In the old days of surgery all the steps of a healing process were attributed to the effects of so-called "mundifying," "incarning," and "cicatrising" applications. In more recent times, lotions, simple, astringent, or stimulating, have generally been deemed sufficient; while still more lately, since M. Pasteur ascertained that the decomposition of animal substances is mainly owing to atmospheric influence through the agency of its organic molecules, carbolic acid, with other antiseptics, have been variously employed to lessen the discharge and feetor of suppurating surfaces. But it was left for Mr. Lister to conceive the fruitful idea of excluding entirely the noxious elements of air so as to protect completely from disturbance the natural restorative action, to which he attributed greater potency than had ever previously been suspected. Thus, while others had used the means just mentioned as correctives, he employed them as preventives, attributing no beneficial effect to their own action on the living tissues, and regarding them merely as a defense from the external source of disturbance. I am

told that in one of the London medical journals there has lately appeared a doleful list of bad results from the treatment in question; but I would beg to suggest that, since it has proved so eminently successful in the Royal Infirmaries of Glasgow and Edinburgh, such testimony tends to reflect rather on the practitioner than on the practice. The truth is, that the antiseptic system, in order to be employed with advantage, must be carefully studied and fully understood, theoretically as well as practically. The preparations employed by Mr. Lister, which have been adopted here, may be denominated carbolic oil, carbolic lotion, and carbolic paste. The composition of the first is carbolic acid and boiled linseed or other fixed oil, in the proportion of one to five: that of the second, carbolic acid and water, in the proportion of one to thirty; and that of the third, carbolic oil with whitening, in the proportions requisite for the consistence of soft putty.

CASE I. Parotid Tumor.—Mrs. T., aged 32, from Aberdeen, recommended to my care by Dr. Kerr, one of the surgeons to the Royal Infirmary of that city, was admitted on the 20th of November last for the removal of a tumor occupying the whole of the parotid region. It was of ten years' duration, firm consistence, and nodulated form, hardly admitting of motion, but very distinctly defined. On the 26th I performed the operation without any difficulty or injury of the portio dura, twisted the vessels, sponged the wound with carbolic lotion, stitched the edges together by silver sutures, and applied a plaster of carbolic paste. On the third day the wound was found to be quite healed; on the fourth the stitches were taken out, and on the eight the patient went home.

There are few wounds less apt to heal by the first intention than that which results from the excision of a parotid tumor. The depth and irregular form of the cavity, together with the oozing of blood from the glandular texture, which must be cut more or less during the operation, sufficiently account for the difficulty thus experienced; and the perfect union without a drop of matter, which has just been related, may there fore be regarded as very satisfactory testimony in favour of the antiseptic trea ment combined with torsion.

CASE II. Wound of the Knee-joint.—On the morning of August 10, J. D., a farm servant, aged 53, while going out to cut grass in the neighbourhood of Carnwath, about thirty miles from Edinburgh, fell upon his scythe, which inflicted a severe wound on the right knee. He was put into a cart and conveyed to the nearest railway station, whence he travelled to Edinburgh, and was taken in a cab to the hospital. It then appeared that a wound, about four inches in length, extended

obliquely across the knee, dividing the quadriceps extensor tendon, and affording free access to the joint. Carbolic oil was freely applied, by sponging the cavity; the cut edges, which had been widely separated, were brought together by sutures; a pledget of carbolic oil was placed over the wound; and a splint was applied to keep the limb straight. Not the slightest constitutional or local disturbance followed, the pulse never being beyond sixty-three; and on the fourth day, the wound being quite healed, the stitches were removed. On the 13th of September the patient left the hospital with the limb strong and flexible.

There are few more serious injuries than wounds of the knee-joint, even under the most favourable circumstances; and when aggravated by their large extent, rudeness of the weapon that caused them, or roughness of the treatment to which they are exposed, they still more endanger the patient's limb and life. The very satisfactory result of a case in which all the adverse conditions were so conspicuously present, must therefore be considered a very remarkable, if not unprecedented, occurrence.

CASE III. Compound Fracture.—J. P., a boy, aged 5, was admitted on the 30th of September with his leg so seriously injured by having been caught between the spokes of a cart wheel, that it seemed at first sight to admit only of amputation. There was a compound fracture of both bones, and, in addition to this, a wound of the integuments and muscles almost completely surrounding the limb at a higher part. The bones were much displaced, and the soft parts severely bruised. Chloroform having been administered, the carbolic lotion was freely injected between the broken ends, and lint soaked in it was applied over the wound. The bones were then carefully adjusted, and retained in their proper position by lateral splints. There was not the slightest constitutional disturbance, or any discharge of matter from the cavity to the orifice of which carbolic paste had been regularly applied, and the limb is now perfectly straight and strong.

# MORBUS COXARIUS. EXSECTION.

Dr. Sayre presented a second specimen, consisting of the head, neck, trochanter, and about four inches of the femur, removed by operation, from a boy fourteen years of age, in Mount Holyoke, N. J. The operation was performed the Sunday previous, assisted by Drs. Bragg, Rockwell, and Allen. In September last the patient was struck with a bat while at play. The pain occasioned by the stroke was so intense, and the shock to the system so considerable; that fainting ensued. He, how-

ever, soon recovered from its immediate effects. The next day he was exposed to a very hard storm while riding in an open wagon, and without cover, for two hours. The following day he was engaged in digging potatoes for several hours. In the afternoon of that day he went fishing, and, according to his statement, was constantly out and in the water while watching for a bite. That night he had a severe pain in his hip. accompanied by a chill, and from that time until the operation, was forced to keep his bed. Three weeks from that time an abscess appeared on the upper and anterior portion of the thigh, just in front of the trochanter major, which pointed and opened itself. This opening was afterward enlarged by Dr. Rockwell. It continued to discharge, but there was not full drainage. Matter formed there, and various other openings had occurred, so that at the time Dr. Savre saw the case, there were nine of these sinuses running in various directions around the hip-joint and femur, but through none of them could bare bone be detected. This latter circumstance occasioned no little difficulty in diagnosis, so that the attending physicians were unable to decide between hip disease and lumbar abscess.

When Dr. Sayre saw the patient he was confined to his bed with a weigh and pulley attached to his feet. The measusement from the anterior superior spinous process of the well leg was thirty-three and three quarter inches; from the same point the right leg measured thirty-two inches. The size of his left leg at the largest part was nine inches in circumference, while the calf was only six inches in circumference. The knee was over nine and a half inches in circumference. He was, in fact, reduced to a mere skeleton. His body was twisted, as is usual in that deformity.

It was recommended to make an explorative operation. The diagnosis given at the time was, that the disease had commenced as periosteal inflammation, and had subsequently involved the joint, producing a luxation of the head of the femur upon the dorsum of the ilium. The determination was, in case the head of the bone was found diseased, to exsect the joint. The ordinary incision was made over the protuberance, but not quite so far back as he would have liked to have had it, on account of the various sinuses in the neighbourhood. The head of the bone was found entirely without the acetabulum, the only case, by the by, that the operator had seen in which the disease was of such short duration. The acetabulum was perfectly healthy, except a bare inch of diseased surface at the upper and outer portion of the rim. The bone was, however, very rough and very much enlarged, as the result of ossific deposit from periosteal inflammation, and the disease had

extended some three inches down the femur, where it ended abruptly in healthy bone. At that point the saw was applied. On making the incision the knife was passed half way round the bone, and the section of the bone made at right angles. The periosteum was completely peeled off, except a small portion attached to the digital fossa, which required the knife.

In conclusion, he stated that he had that afternoon received a telegram to the effect that the patient was doing splendidly. Med. Record.

#### EXTIRPATION OF THE SCAPULA.

Dr. Rogers exhibited a scapula which he had extirpated from a girl seven years of age, for malignant disease. About the beginning of this year the patient was said to have received an injury of the scapul. Rogers saw her a few months after, for injury of the elbow, when the mother called his attention to a bunch on the scapula, in the infraspinatus fossa. He watched it for a few months, and regarded it as probably cartilaginous in character. With that view it was afterward extirpated. The bone below it was roughened at the point of attachment. The mass, however, on being afterward examined by Dr. Jacobi and himself, proved to be malignant in character. The wound healed quickly, and the child was apparently in perfect health. The return of the tumour was, however, anxiously looked for. Finally, at the end of two or three months, a nodule made its appearance under the spine of the scapula. It grew with moderation for two months, when a New Jersey cancer doctor was consulted. He applied some of his cure-all ointment, which was of a very irritating character, the result being a frightfully rapid increase of the morbid growth. This disposition to enlarge was very marked until the afternoon of the 11th of December. when the mass was removed, which was simply an extirpation of the entire scapula. The bone was found exceedingly rotten, and saturated with disease.

The dissection was of course in a measure explorative. The clavicle was found entirely free from disease. The coronoid process was loose, and in raising up the mass the acromion process of the scapula left its attachment to the spine of the scapula, and adhered by ligament to the clavicle. The ligaments of the clavicle were not diseased.

"The child," said he, "is not quite eight years of age, and, considering the size of the tumour, I am afraid I have been performing one of the most frightful operations on the scapula on record. The largest tumor reported weighed a twentieth part of the individual; this is a tenth part of the entire child!"

Although there were four inches of skin taken away with the tumour, there was no difficulty in bringing the ends of the wound nicely together.

The end of the humerus was brought up against the end of the clavicle, and kept in that condition by confining the arm diagonally across the chest. There was less hæmorrhage than was anticipated. Four hours after the operation reaction was perfectly established, and a good night's rest was enjoyed. At the end of thirty hours the child had some irritative fever, and was suffering from some nausea, which the doctor did not feel quite certain was not caused by ether.

The dissection exposed the axillary artery throughout a considerable portion of its course. The arteries of import that were ligated were the supra-scapular and subscapularis.—New York Pathological Society, from Medical Record.

#### ON A CASE OF EXTREME IRRITABILITY OF THE BLADDER.

Under the care of Sir H. Thompson, at the University College Hospital.

A patient (a case of supposed stone in the bladder) came under Mr. Thompson's care some time ago, with a bladder so irritable that he could not retain his urine even for a few minutes at a time, passing it as often as twenty-four times in the daytime, sometimes two or three times in the course of a meal. Mental influences had considerable effect on it; if the patient became at all excited, it came oftener. Yet there was no pain in the penis, no blood in the urine, and seldom any pain in the back. When sounded no stone could be felt, and with all this the urine was perfectly natural and healthy in every respect-in fact, no cause could be assigned for the complaint. The remedy, however, was more apparent, for belladonna, exhibited as suppository and given by the mouth, speedily improved his condition amazingly, but he is not yet well. A hint appropos of this case may not come amiss to some of our readers, who have, doubtless, been troubled with cases of unhealthy urine containing much mucus mixed, it may be, with pus-consequently apt to decompose, become ammoniacal, deposit its phosphates, and irritate still more the already irritated bladder. They may have tried all the recognised and timehonoured remedies, including Brodie's favourite, Pareira, and yet have done no good. Under such circumstances, let them not forget a remedy sometimes ordered by Mr. Thompson-a common field plant, Alchemilla arvensis, or parsley-piot, an infusion of which (one ounce to one pint) will often succeed where more pretentious remedies have failed .- Medical Times and Gazette, July 27, 1867, p. 92.

LANCING THE GUMS IN CHILDREN.—Dr. F. H. Thompson, believing that the irritation of teething is caused by the engorgement of vessels supplying their circulation, advises the practitioner to cut low down at the reflected junction between the lip and the gum, instead of upon the summit of the gum itself.—Med. Record.

### ERGOT IN PARALYSIS OF THE BLADDER.

Dr. Leon Serret was called to a patient, aged 66 years, who had been suffering from incontinence of urine for fifteen years. On the day of the visit the patient had complete retention. There was no constriction of the urethra, marked sensibility, or obstacle to the passage of water, except a slight enlargement of the prostate. At the end of eight days the patient had still no power over the bladder. The case being considered as one of paralysis, owing to over distension, it was concluded to try the ergot of rye in powder; thirty grains during the day. This produced no effect beyond slight pains in the hypogastric region, and the water still required to be drawn with the catheter. At the end of ten days the ergot was administered in fifteen-grain doses, four times daily, at twenty minutes interval before and after a hip-bath given in the morning. From this time the patient could urinate, and the incontinence disappeared. This treatment was continued for fifteen days, at the end of which time the patient was cured.—Med. Gazette, N. Y.

# Medicine.

AN ESSAY ON THE THERAPEUTIC VALUE OF CERTAIN ARTICLE. OF THE MATERIA MEDICA OF RECENT INTRODUCTION

Bead before the New York State Medical Society, February 4th 1868. By Jose H. Griscom, M. D., of New York.

#### SULPHITE OF SODA.

In view of the serious responsibility imposed upon all practitions of medicine, I solicit the favour of a few minutes attention for the presentation of the results of an extended and successful experience with the employment of the sulphite salts of soda.

The chemical composition of this material is as simple as that of ny other salt—its two ingredients, sulphurous acid and sodu, bean ell known. The acid constituent, in its separate form, has been loan a reciated as one of the most effective antiseptics and deodorizers where ed externally. In fact, it is one of the most ancient disinfectants, he ng

been originally employed in its gaseous form, generated by the simple combustion of sulphur. As an antiseptic, a preventor of decomposition and of fermentation, and as a sustainer of the natural composition of nearly all vegetable and animal materials, it appears as useful in the interior, as in the exterior of the organization. On this principle, its efficacy as a remedial agent is chiefly founded, but I have been led to the conclusion that it has an additional value as a promoter of digestion, in cases in which the gastric juice may be deficient in some of its acidulous ingredients.

My experience with the remedy referred to in the treatment of diarrhœa, dysentery, cholera morbus, as well as dyspepsia, has been most decidedly beneficial. From five to twenty, forty, or sixty grains, according to the age of the patient and the severity of the symptoms, administered two, four, or six times a day, have, in almost every instance, had the effect of speedily arresting the discharges, and relieving the nausea and the colicky irritation. I could cite several cases in which its efficacy has proven as prompt as any other remedy before tried, and in not one have I seen any bad effect or failure. As to its modus operandi in these complaints, it seems to act in the double capacity of an antiseptic and astringent. On the latter principle, its influence appears sometimes almost as speedy and efficacious as opium. In cases of constipation derived from torpor of the liver, or deficient peristaltic power of the intestinal tube, its corrective influence over almost all functions aids to restore a healthy action of the muscles of the bowels.

In dyspepsia its efficacy has been most marked, especially when the disorder is accompanied with flatulence and eructations of food. These symptoms are doubtless the result of the decomposition and fermentation of the foreign material in the stomach itself, from one or more of the causes before mentioned. In such cases the sulphite salt operates, in the first place, as a direct and powerful arrestor and preventive of the decomposition of the food, in the same manner as it does on the outside of the body; and, in the second place, its acid constitutent, either in its original sulphurous form, or by its advancement to the sulphuric form, doubtless compensates for some of the deficiency of the gastric juice, and in this way completes the digestive process as far as the gastric function is The form of administration which I have found most useful and successful in dyspepsia and its attendant circumstances, is in combination with tonics and carminatives, avoiding alcoholic stimulants on all occasions. My chief combination is tinets of cinchonæ comp., and and cardamoms, and syr. aurantii, with the sulphite in separate solution, combining the two at the time of administration.

It speedily arrests the fermenting process which the contents of the alimentary canal so frequently undergo, climinating gases, producing symptoms of flatulence, and which doubtless in many cases is the cause of the diarrhea, nausea, colic, and other attendant symptoms.

In the diseased condition known as Scorbutus, there is a most direct demand for proper alimentary material, and therein we find the sulphites valuable, not only as a means of suspending the fermenting process, but also, by the agency of both its acid and alkaline constituents, prometing digestion itself.

But it is not alone upon the contents of the stomach and bowels with which the salt comes in direct and immediate intercourse, that its antiseptic and antizymotic influence is exerted. This, as before suggested, is probably due to the action of the sulphurous acid derived from the decomposition of the salt. But there are many diseases of a zymotic, character, derived from cases wholly independent of the digestive function, upon which this agent has been found to exert a curative influence as rapid and efficacious as in those already referred to.

We have several reports in medical journals, of its efficacy in intermittent and typhus fevers, in scarlatina, small-pox and measles, the theory of its action in which is, that the acid is absorbed into the blood itself, and therein exerts its antiseptic properties directly upon the materies morbi which give rise to the disorders.

Its value in erysipelas I have had the gratification of testing in several cases. In one case in the New York Hospital, found on the face of a delirium tremens patient, a few doses of the salt wholly relieved that symptom in twenty-four hours. In this peculiar disorder there would seem to be a very plain reason for its usefulness, it being a disease whose source is most plainly derived from internal derangement of the blood, producing obstructions of the functions of the capillary circulation of the skin, thus giving rise to congestion and inflammation. That it is derived from some chemico-pathologic alteration of the blood, there can be no doubt, although we know not the true nature of the change.

In several cases of bronchial and pharyngeal catarrh, I have also observed singularly beneficial results from its administration in connection with local treatment, this disorder being considered as based upon the same foundation as cutaneous crysipelas.

In that peculiar pathological condition of the blood and cutaneous organization which is manifested by the production of numerous furuncles, commonly known as boils, the administration of sodæ sulphis, in combination with the carminative tonics, has proved, under my observation, a very perfect and rapid remedy. The same remark is applicable

to another cutaneous disorder, dependent wholly upon gastric derangement. I refer to urticaria.

During the preparation of this essay, the most extensive and violent case of this disease that ever fell under my observation, came under my care. It was a lady age 17, who had suffered greatly for several days with nausea, sleeplessness, an eruption covering almost the entire cutaneous surface, and accompanied with excessively violent itching. In twentyfour hours, a few doses of forty grains each, of sodæ sulphis, combined with carminative tonics, and a local external application of a solution of the salt, relieved all the symptoms to a great extent, and in forty-eight hours, they all wholly disappeared, leaving the patient in good health.

Another application of this salt, which I have found both highly interest ing and valuable, is, in the case of infants, by whom their natural food, the mother's breast milk, is frequently rejected.

A dose of two to five grains in combination with a few drops of the tinct. card. c., sweetened with a little syr. aurantii, has in many instances proved directly successful in causing a retention and assimilation of the stomach's contents, when administered soon after imbibition, thus greatly promoting the health and strength of the juvenile.

There are three forms of this salt, viz., the sulphite, the hyposulphite and the bi-sulphite-the first of which has been my principal dependence, though the others, when employed in proportionate for the supply of the acid constituent, are equally useful. The only objection to the bi-sulphite is its being somewhat uncertain as to the proportions of acid contained in it, unless kept in solution, as a portion of the gas is liable to escape when exposed to the air in the crystaline form-

#### ON THE TREATMENT OF HYPOCHONDRIASIS

By Dr. C. HANDFIELD JONES, F. R. S., Physician to St. Mary's Hospital.

[We all know how difficult cases of hypochondriasis are to treathow almost impossible it is to persuade the patient that the alarming apprehensions with which he is haunted have no basis in reality. It does not become a truth-loving and earnest physician to treat such a malady in a superficial manner.

The following instances illustrate the importance of searching for physical causes which may give rise to the complaint. Romberg (vol ii., p. 6) says. "The hypochondriasis of students frequently produces pal. pitation; and an instance of its occurrence from the same cause in advanced life is presented to us in P. Frank himself, who, while devoting special attention to the subject of heart disease in Paris when preparing his lectures, was attacked with such severe palpitations, accompanied by

an intermittent pulse, that he felt assured he was affected with an aneurism. The symptoms only ceased after the completion of his labours and after he had enjoyed the relaxation and diversion of a journey." I am well acquainted with the case of a gentlemen who, while studying medicine, became haunted by the idea that his abdominal aorta was aneurismally dilated, and was pressing on the bodies of some of the lumbar vertebræ. He was quite aware of the delusive nature of this idea, and very sensibly endeavoured to shake it off by a trip into the country. This, however, entirely failed, and the morbid imagination prevailed to such an extent that his life for some time was rendered very miserable. A man of great mental capacity and attainment assured me that at one time, after much hard work, he became so unnerved that he did not like to drive to the city in his brougham unless his wife went with him. In all these instances the mind was clear and free in itself, and its actings were only impaired by reason of the cerebral machinery in one part being out of gear. To say that these persons were affected with insanity as the term is currently employed, would no doubt be incorrect; but I cannot avoid believing that such aberrations from the normal acting of nervous centres are minor shades and degrees of the same morbid process which, in its higher developments, deranges the intellectual faculties more or less completely. One cause of exhaustion of nervous power, which often induces hypochondriasis to a most pitiful extent, is spermatorrhea, or, as it might be better termed, "chronic prostatitis," the result of sexual excesses or abuse. The reality of this cause is admitted by Romberg, Copland, Albers, Trousseau and Erichsen, although it has been denied by a late writer. I hardly think that any one who reads the cases recorded by Lallemand, and compares them with those occurring in his own experience, can doubt the pernicious effect of such deepseated urethral irritation on the superior nervous centres, or the advantage which may result from appropriate local treatment,

The subject of the following history, J. J., a carpenter, aged 37, married, applied to me as an out patient at St. Mary's, Aug. 6, 1863. He continued under treatment till Nov. 17, 1864, when he was discharged fairly well, having improved almost continuously since the beginning of June. He was a rather pallid, pusillanimous-looking individual, tall and spare, who addressed you in a rather anxious fussy manner, with a low voice. His complaints were of pain in the lower lumbar and sacral regions, extending from the top of the sacrum forward to a spot near the umbilicus, with weakness of the calves of the legs. At one time he had a sense of rising and suffocation in the throat, or a feeling of weakness in the part, attended with copious expectoration (?) of mucus. A

nocturnal urticarious eruption was another of his troubles, but did not last long. His chief affliction, however, was a sense of scalding felt along the urethra after micturition, which lasted about half an hour. With this there was said to be a slight gleety discharge, but of which I could rarely discover any traces. It seemed, however, to dwell much on his mind, and he was constantly referring to it. He attributed it to a previous gonorrhœa, and affirmed that he had never been right since. I tested at one time the effect of a balledonna injection into the urethra, in the hope that it might allay the scalding dysæsthesia, and arrest the discharge. This it might be expected to do, on the view maintained by several eminent authorities, that the drug acts as a tonic to the vasomotor nerves. In this respect, however, it failed entirely-indeed, it acted in a contrary way, increasing the discharge considerably, and rendering it more yellow, though the scalding appeared to be relieved. The strength of the injection was fifteen to thirty grains of extract of belladonna, to four ounces of mucillage mixture. I may remark, by the way, that Mr. Jabez Hogg has seen a very weak solution of atropine produce in a healthy eye a very large amount of congestion (vide "Opthalmic Surgery," p. 98). That belladonna acts as a sedative to the sensory nerves of an irritable bladder, or of irritable bronchi, and that in large doses it paralyses the vaso-motor nerves of the head and face, appear to me tolerably well established facts, and by no means consonant with the views above referred to. I should, however, mention that I have found the drug to act very beneficially in cases of cynanche tonsillarias, and perhaps—as in this instance, the reduction of the inflammatory tumefaction depends probably on arterial constriction—the truth may be that in large doses it acts paralysingly, in smaller toningly, just, indeed, as alcohol does. Whether a drug can act in one way on one region of the body, and in an opposite way on another, is at present extremely doubtful. But to return to our case. The remedy which appeared to effect a cure was strychnia, which he took in doses of a sixteenth to a twelfth of a grain, together with sulphate of iron and cod-liver oil, during most of the time, for ten months continously. In another very similar case the same remedy appeared of decided efficacy, but the patient did not attend so perseveringly as the one whose history I have related. In him I think there can be no question that the urethral disorder was slight, and was not the real cause of the depression of nervous power. Had it been otherwise-had the cerebral paresis depended on genitourinary irritation acting in an inhibitory manner upon the brain, local remedies would in all probability have been required. As it was-as

the hypochondriasis was primary, and not of reflex origin, the steady tonic action, of a nervine, aided, doubtless, importantly by the cod-liver oil, sufficed to restore the nervous centres to a fairly normal condition.

The following history may, I think, be compared instructively in some respects with the above. A gentleman, aged 28, who had been long exposed to the enfeebling influences of a tropical climate, and had suffered several severe attacks of tracheitis, consulted me at first for the latter, but subsequently complained of a good deal of what he called a gleteey discharge. I found that this was not constant. There was no trace of discharge when I examined the penis. He stated that it came on after any exertion; often occurred quite irregularly, and without any erection taken place. It was evidently more of the nature of an emission than a running, and caused, when it happened, a great sense of debility. He felt it an inconvenience and a detrioration of his health, but did not complain about it more than a reasonably might. He showed no sign of hypochondriasis. He acknowledged that his venereal appetite had always been strong, and that he had committed a good deal of excess in this way. I prescribed for him a pill composed of six grains of lupuline a grain and a half of camphor, and a quarter of a grain of extract of belladonna, two to be taken twice a day; and a short time the annoyance entirely ceased. Now I will ask the reader to observe—(1) That in this case there was quite as much, if not more, genito-urinary disorder than in the first, yet there was no hypochondriasis, which was so marked a symptom in J. J. (2) That the experience of the best authorities . is quite decisive as to the production of even actual insanity by genitourinary irritation. Brown-Séquard mentions having obtained the cure of a case of insanity with general paralysis, in a male who suffered from inflammation of the prepuce and glans with phimosis, by having circumcision performed (vide the Lancet, 1861, July 27th). (3) That therefore we must admit that the vital condition of the nervous centres determines very much the effect which shall be produced by a peripheral irritation. A slight one may cause severe symptoms; a greater none at all; according to the amount of resisting capacity possessed by the patient. Lastly, and as the general lesson from the whole, I will remark that it is evidently of the first importance to distinguish primary hypochondriasis attended with genito-urinary dysæsthesia from secondary hypochondriasis depending on genito-urinary irritation; and that while it would be a great mistake to employ local measures, such as cauterisation, in cases of the first kind, they may be quite necessary in severe cases of the second .- Lancet.

# THE TREATMENT OF OBSTRUCTION OF THE BOWELS. By Dr. Thomas Head, Carlisle.

In cases of obstruction resulting from the lodgment of undigested articles of food, observation has led me to regard the lower portion of the ileum or the ileo-cæcal valve as the locality of the disease, and having seen such frequent instances of disappointment in the use of enemata of the ordinary quantity, I have been led to place my chief reliance in those of large volume. For constipation limited to a loaded state of the colon, injections possessing stimulating properties will generally prove successful; but in cases similar to that described, they will most frequently be found inefficacious. A pint enema, with a few drops of laudanum, may indeed with advantage be injected, and upon it the oil in the quantity described; the oil ascends through the watery fluid and is thereby more certain to reach the seat of the disease.

On consultation with Dr. Todd, in the case of a young man who had eaten a large quantity of unripe fruit, followed with great abdominal pain and with obstinate constipation, the bowels not having been relieved by any treatment adopted. I suggested the use of an enema of three pints of warmed oil, which was reluctantly acceded to in consequence of previous small enemas being still retained, and Dr. Todd made it a condition that I should superintend its administration, to which I readily consented; the whole of the oil was slowly and carefully thrown up into the bowels; the abdomen became enormously distended and the stomach rejected every thing taken-even the smallest quantity of fluid of any kind was rejected. The oil was retained in the bowels by means of pressure over the anus by a soft napkin, continued for more than an hour. In less than three hours part of the oil returned with slight appearances of fæculent matter; but, within ten hours after the warm oil had been injected, four or five copious evacuations were passed containing enormons quantities of scybalous fæces. During the operations upon the bowels anodynes and champagne were given, and some refreshing sleep ersued. This young gentleman's health remained for some time in a precarious state, but was eventually completely restored. Some weeks after this attack a thickened condition of the ileo-cæcal valve, which, however, disappeared in course of time, could be distinctly felt by a manual examination. The bowels remained rather torpid, but in other respects his health was gradually and eventually completely reinstated.

Obstruction of the Bowels.—Failure of Small Injections.—Successful Effects of Copious Injections of Oil.—Recovery.—A poor woman, a patient in the Carlisle Dispensary, married, aged 34 years, became the subject of obstruction of the bowels. The physician under whose care she

came had not seen her for two days, but had ordered a small treacle and water enema to be administered with the old pipe and bladder apparatus. In consequence of his absence I was asked to see the case. All the symptoms of obstruction of the bowels in a severe form were present: the internal medicines which had been prescribed had proved unavailing and had caused much vomiting. I ordered hot fomentations with turpentine to be applied to the abdomen, and a large oleaginous enema to be administered with the syringe and O'Beirne tube; in the course of a few hours the bowels acted freely with great relief to her sufferings; the symptoms of peritonitis, the result of intestinal distension, rapidly abated, and she made a speedy recovery.

The next case presents points of much professional interest.

Obstruction of the Bowels of ten day's duration. Recovery .- A gentleman, aged 56, extensively engaged in the corn trade, who had been in the habit of biting wheat and other grain to ascertain their quality, and to swallow the particles thus introduced into his mouth, was attacked with great pain in the bowels (especially on the right side, in the situation of the ileocæcal valve), accompanied with vomiting; the pulse was rapid and feeble. The treatment consisted at first of hot fomentations and turpentine to the abdomen, an enema of oil saponified with liquor potassæ and turpentine; moderate doses of calomel opium and creosote were given at short intervals' From these remedies, no relief was procured. The pain having increased in the right side of the abdomen, ten or twelve leeches were applied; no improvement in the symptoms took place; large enemata of oxgall and warm water were repeatedly administered; no satisfactory results followed. Three pints of warmed oil was now administered as an enema, and retained by firm external pressure to the anus. The sickness became most distressing, followed, by severe vomiting, and a large quantity of the clear oil that had been injected in to the bowels was thrown off the stomach; this took place repeatedly for the next few days, with, however, an apparent diminution of the pain and other distressing symptoms. No evacuation from the bowels took place. Pills of concentrated oxgall, with creosote, were now repeatedly given, and a free evacuation of fæcal matter speedily followed. mixed with immense quantities of comminuted grain; the motions appeared devoid of bile. The stomach became less irritable and the vomiting gradually subsided. A tablespoonful of recent oxgall was given every morning with a few drops of chloric æther, and was happily retain. ed, and the bowels by these means were brought into free daily action. The obstruction of the bowels was of ten days' duration. The patient

gradually recovered his health, and, with the occasional use of artificial and natural Harrowgate water, the bowels have been restored to a much more healthy state than they have been in for a long time previously.

Obstruction of the Bowels of twenty-one day's duration.—Recovery.—
It must not be supposed that all cases of intestinal obstruction are characterized with the urgent symptoms detailed in the preceding cases; on the contrary, it may be safely affirmed that in persons of advanced age, the system acquires under every form of obstruction a power of endurance much greater than in younger persons suffering from the disease. The following is a good example of this condition:

A Lady living in the vicinity of Edinburgh, aged 74, became the subject of intestinal obstruction, and, notwithstanding that all the ordinary remedies were unremittingly used for a period of three weeks, no fæcal evacuation was procured. At this date the late Dr. Allison saw the case, in consultation with Mr. Sanderson of Musselburgh, and, as a last resource, small and repeated doses of calomel and opium were prescribed; in three days ptyalism ensued, and on the day following free fæcal evacuations took place; the bowels now became so very much relaxed as to threaten fatal exhaustion; by the use of stimulants and mild nourishment a slow recovery was made and the life of the old lady was prolonged for several years.

The practical conclusions to which these cases would lead us arethat in the intussusception of infancy inflammatory action which occurs in the middle periods of life is not excited in the serous membrane; that the straining and the evacuations of pure mucus streaked with blood are points of the highest diagnostic value. In such cases the peristaltic action of the small intestines ought to be allayed rather than excited by medicines given by the stomach; and oleaginous enemata and quicksilver are means of the most probable efficacy for restoring the displaced intestines to their healthy relations. Where obstructions depend on the presence of undigested aliment, the lodgment most frequently occurs at the commencement of the large or near the termination of the small intestines. After the lower portion of the colon has been cleaned out by the use of a strong enema of oil, saponified with a little liquor potassæ, combined with about an ounce of turpentine, without the general peristaltic functions of the bowels being restored, it becomes desirable to use large enemata of warmed oil, the lower portion of the colon having been previously filled with a small ordinary enema of warm water, to which a few drops of laudanum may be added to secure its retention. Experience has appeared to justify me in believing that this mode of treatment is calculated to accomplish relief more speedily and certainly than the kind of treatment ordinarily adopted.

In the obstruction of aged persons the tendency to inflammatory complications becomes lessened, and the treatment may, on that account, be both of a less energetic character and be longer persevered in before either relief to the obstruction or a fatal issue occur. It may here be also noticed as a point of diagnostic value, that in obstruction of the bowels, the seat of the disease being near the small intestine, the symptoms more nearly resemble those present in strangulated hernia, while, when the large bowels are obstructed by scybalous accumulations, there is much less irritability of the stomach, although in both great abdominal pain may be produced—St Bartholomews' Hospital Reports.

ON THE USE OF IODIDE OF LEAD IN CUTANEOUS DISEASES.

By Dr. T. W. Belcher, M. A., Physician to the Dublin Dispensary for Diseases of the Skin.

[The use of iodide of lead in the treatment of porrigo was introduced to the profession in Ireland by Dr. Neligan, in an article published in the Dublin Quarterly Journal for August, 1848].

I have lately had under my care several private cases, in which I have used iodide of lead externally with great advantage; as neither in the last edition of Pereira's Materia Medica, nor in the exhaustive Traiti de Thérapeutique et de Matière Medicale, by Trousseau and Pidoux; nor even in Professor Macnamara's last edition of Dr. Neligan's Materia Medica is much to be found about this medicine, which has been more or less in use for thirty-six years, it may perhaps be useful to give an abstract of a few cases in which it was used externally.

Case 1. In April last, Dr. Owens, of Kildare-street, asked me to see with him a patient of his, a gentleman advanced in life, who had long been tormented with what proved on inspection to be chronic eczema. The disease was apparent on various parts of the body, but particularly on the legs and thighs; the itching was intense, and many preparations had been tried with little benefit. At first I suggested that an ointment of subacetate of lead containing glycerine and chloroform should be applied to the disease; and I had great hopes that this would produce immediate relief, as I had known it to do in other cases which I had treated shortly before that date. However, it produced little, if any, relief in this case; and accordingly, on my suggestion, Dr. Owens agreed to try the iodide of lead, which was applied in the form of ointment, twelve grains to the ounce, with one drachm of glycerine, and forty minims of chloroform. This procured immediate relief from the intense and aggravating itching; and the patient, having the advantage of frequent supervision from Dr.

Owens, gave the remedy fair play, so that shortly after, on my seeing him again in consultation, I was agreeably surprised at the result. The disease had in a great part disappeared; we agreed to continue the treatment, adding to the ointment as much chloroform as the preparation would take up. A few days ago I was gratified to learn, from Dr. Qwens, that the patient was quite well.

Of course he took constitutional remedies as well as using local ones. It is doubtful whether in this case the iodide of lead, per se, would have cured the disease; chloroform certainly would not; but the conjoined use of the two was most beneficial; and I have no hesitation in recommending a preparation, such as I have above described, to the general use of my professional brethern.

Case 2.—I was called in to see a young lady who was subject to erythematous eruptions on the face, amounting frequently to erysipelas. At this time the attack was of the latter nature; the face was red and swollen; not painful and itching. Besides giving a purgative, I ordered an ointment of about the same strength as that above mentioned. Its good effect was almost immediate. In two or three days I saw her without a trace of the affection for which I had visited her. This was always before that time constant to a greater or less degree; and had been more or less benefited by various local and constitutional medicines; but now it wholly disappeared, and has not since returned, so far as I know.

Case 3,-A young gentleman, an undergraduate of one of the colleges in Oxford, of excellent general health, given to open air sports, and without any evidence of personal or hereditary syphilitic taint, consulted me a few months since for psoriasis, which he had on most parts of his body, save his face. I directed him to take Neligan's ioduretted solution of the iodide of potassium and arsenic, described on page 268 of my edition of his work on Diseases of the Skin; and to use locally Hebra's tincture, which I have described on page 114 of the same work and also in a paper in the number of this Journal for May, 1865. He was further directed to take vapour and tepid baths, and physical exercise. I have seen him several times since his first visit; and always with the evidences of marked improvement in his case. At length I stopped Hebra's tincture, and a similar preparation of rectified spirit, soft soap, oil of cade, and oil of lavender, which for a short time previously I had substituted for the former; and prescribed for him instead of them the following ointment: -- " Iodide of lead, twenty grains; simple ointment, seven drachms; glycerine, one drachm.3"

He was directed to continue the constitutional treatment as before. In about a fortnight I perceived the disease to be greatly improved; in

fact, the psoriasis may be said to have disappeared, so far as external appearances went; and the skin had quite regained, in most places, its natural colour and texture. I know the amelioration must be largely due to the use of the constitutional means above noted: but in no case treated throughout as this was at the outset (see above) have I seen the same speedy repair of the skin and its function as was so very remarkable in this instance,

I might mention several other private cases in which I tried it with quite as much benefit as in the above, but they would inconveniently extend the length of these observations. The ointment of the iodide of lead of the present *Pharmacopæia* (1867) I conceive to be very much too strong for such cases as I have noticed. It contains sixty-two grains to the ounce; whereas from a fifth to a fourth of that quantity is quite sufficient, and more useful than the pharmacopæial strength. In the case of porrigo, in which Dr. Neligan first used it, he put thirty grains to the ounce; and therefore we read with little surprise that in some cases "iodide of lead ointment excites a certain degree of inflammation." No such result follows the use of the weaker preparation; but the stronger is nevertheless useful in other conditions of the skin than those I have described.—Dublin Quarterly Review.

# ON DROPSY OF THE PERITONEUM: ASCITES.

By Dr. S. O. HABERSHON, Physician to Guy's Hospital.

The habit of designating disease by the name of one of its symptoms is fraught with many disadvantages; but this is, unfortunately, a practice too frequently adopted. Jaundice is merely a symptom; but it is the name given to a class of diseases, although produced by a variety of conditions. Albuminuria and Bright's disease are terms of general significance; so of others in ordinary use. Thus, also, dropsy of the peritoneum, or acites, is often designated dropsy; and we admit that there is some excuse for applying such an appellation to this efusion into the largest of the serous membranes. Ascites is often associated with anasarca, and it thence constitutes a part of the general dropsy. But the varieties of peritoneal effusion are worthy of especial consideration; and it is to this local dropsy, in its several aspects, that I invite attention.

We distinguish several forms of peritoneal effusion---

1. From atrophy: as in senile wasting; in exhaustive cachexiae; and in simple anæmia.

- 2. Ascites from obstruction: as in cirrhosis; in heart disease; in chronic bronchitis; in any obstruction in the vena-portæ or vena cava.
  - 3. Ascites from renal disease.
- 4. From glandular disease, whether affecting the spleen or lymphatic glands, &c.
- 5. Inflammatory ascites.
- 6. Strumous ascites.
  - 7. Cancerous ascites.

And although in each of these forms of peritoneal effusion the malady may be produced by some general ailment affecting the whole system, in the last three we have a more especial *local* manifestation of disease; and I have found these varieties overlooked or imperfectly understood.

- 1. Atrophic ascites is often present at the close of wasting disease. We find in the feebleness of old age; in exhaustive cachexiæ; and in simple anæmia. The effusion is of a passive kind; but it is sometimes sufficient to call for notice. The circulation in these cases is retarded, or has almost ceased, from failing power, or from fibrinous coagulation in the veins; and slow extravasation then takes place into the serous cavity and areolar tissue. It is a kind of exosmosis, and closely resembles the passage of serum into dependent parts of the body after the circulation has stopped.
- 2. A second form of ascites may be correctly designated dropsy from obstruction. Any mechanical impediment to the passage of blood from the portal system of vessels produces this variety of ascites. In several instances I have seen cancerous disease extending directly into the inferior cava, and reaching to the right ventricle, thus preventing the exit of blood from the liver, and causing engorgement of the portal circulation; and in another instance this extension took place into the vena portæ itself, so that the whole structure of the liver was injected with cancerous product. In these rare cases ascites was present from mechanical hindrance to the course of the blood. More frequently we find obstructive ascites caused by chronic disease of the liver, or of the heart or of the lungs and bronchi. In the latter varieties the legs become anasarcous, and so also in many cases of hepatic disease, as cirrhosis; for the obstruction affects the whole inferior cava, and in cirrhosis it will be found that contraction at the lobulus Spigelii hinders the free passage of blood from the inferior cava close to the heart. This form of effusion may be merely serous in its character, but, from the long-continued congestion of the capillary vessels of the peritoneum, the nutrition of the serous membrane is generally more or less interfered with;

the membrane becomes thickened, granular, and in colour opaque; and, what is of still greater importance to remember (especially in the consideration of operative relief by paracantesis), acute inflammatory changes are very easily induced, and fibro-albuminous product is quickly poured out. I would en passant, refer to a rare form of passive ascites from obstruction which I have witnessed on two occasions, in which the effusion had a milky aspect, and was in part of a chylous character. In one of these cases the pressure involved the thoracic duct; and in the other the mesenteric lacteal vessels were very much distended, from obstruction in the mesenteric glands.

- 3. A third form of ascites is that connected with renal disease. Acute albuminuria, whether following scarlet fever or from other cause. is often accompanied by serious effusions into the peritoneum, as one of its symptoms, in common with general auasarea; and there is a great tendency to serous inflammation in this disease, apparently from the presence of urera in the serum. The peritoneum shares in this disposition; so that in an analysis of instances of peritonitis I have found that, out of 500 fatal cases, 63 were in connexion with renal disease. These instances of ascites with general anasarca do not call for special treatment. As the renal affection subsides the fluid becomes absorbed and the best mode of treatment is that directed to the relief of the original malady. But there are conditions in which we find renal disease with ascites without general anasarca; I refer to renal with hepatic disease, whether it be chronic contraction of the liver and kidney, as cirrhosis, or 'ardaceous disease. The ailment is of a chronic kind, and the improvement very slow; whilst the ultimate recovery depends on the state of the constitution.
- 4. A fourth variety of ascites might justly be called glandular. The peritoneal effusion is secondary to disease of important glands, by which the composition of the blood is changed. The ascites may be only part of a general dropsy. These instances arise from affections of the spleen and of the iymphatic glands, whether the change be one of congestion, of inflammation, of lardaceous, or other disease. The effusion is of a passive kind, and the treatment wholly of a constitutional character.

In other instances the ascites may be regarded as more especially of peritoneal origin, although the constitution is also at fault. The local treatment is of greater value than in the preceeding forms of disease, for it is in the serous membrane that we have the manifestation of morbid action.—Lancet.

#### ON NEURALGIA.

#### By PROF. TROUSSEAU.

In his lecture on neuralgia, Professor Trousseau brings forward his important observation that in all cases of this disease there is more or less acute pain on pressure over the spinous processes of those vertebræ which correspond to the origin or point of exit of the affected nerves; and to this spinous point he justly attaches very considerable diagnostic value. He draws attention to another peculiarity, concerning which, he thinks, writers have not been sufficiently explicit -- the existence, namely, of cutaneous hyperæsthesia at the points of exit of the nerve-trunks. This he terms the spot of peripheral expansion. He denies the statement of Valleix regarding the superficial tender spots to be found in intercostal neuralgia, but admits the existence (amongst others) of those which he indicated in cases where the cranial nerves are affected. Where the neuralgia is superficial, Trousseau finds that the local application of atropine or belladonna is sufficient to relieve pain in the majority of cases. He generally employs a compress steeped in a solution of sulphate of atropine (five grains of sulphate of atropine in three ounces of distilled water), and covered with a piece of oiled silk to prevent evaporation. This application is continued for an hour at a time, and is frequently renewed, provided no disagreeable constitutional effects are produced. When the neuralgia is more deep-seated or severe, he has recourse to the endermic use of morphia, or the subcutaneous injection of morphia or atropine; and in obstinate cases he makes an incision through the skin, and places in the wound one or two medicated boluses. When he adopts the endermic method, he removes the cuticle by means of ammonia, as it can be done in this way much more neatly and expeditiously than by means of cantharides. He also advocates the inhalation of chloroform during the attacks.—Lancet.

#### EXCRETION OF UREA.

The American Journal of the Medical Sciences for October, publishes a very clever inaugural thesis by Dr. T. R. Noyes, containing a record of experiments on four persons, to determine the effect of food, sleep and exercise in the excretion of urea. The first week the parties experimented on used a mixed diet; the second week they lived exclusively on animal food, the third on purely vegetable food with the exception of a little milk in their bread, their tea and their coffee, while during the fourth week, the diet was the same as the third, but the subjects of the experiment took an unusual amount of exercise.

The first point noticed is that there is no immediate change in the excretion of urea after an alteration of diet, but that it requires three days to exhibit the full effect. Another fact made known in these experiments is that the old rule for estimating the proportional quantity of urea excreted, by the specific gravity of the urine, is by no means of universal application. As for diet, it was found that animal food increased the excretion of urea 169 per cent. but diminished the weight of the body. Free uric acid was detected, showing that the nitrogenous matter had not been all oxidated to urea. On changing to a vegetable diet the urea was diminished 75 per cent. Exercise slightly increased the quantity of urea, but marked increase was observed only as the result of fatigue.

Coffee increased the urea 14 per cent. To determine the influence of sleep, our author lay abed all day for a week, during which time, he found that he eliminated 31 per cent. more urea during the day than at night. The effect of mental occupation is not so distinctly shown, but there appeared to be somewhat less urea excreted during active mental work than when the mind was at rest. The author discharged 2.41 per cent. more urea upon light reading than upon arithmetical calculations.

LACTATE OF ZINC IN EPILEPSY.—Dr. Hart (Chicago Med. Jour.) has tried this remedy in combination with belladonna, on 240 patients in the Western Lunatic Asylum of Kentucky, all of whom had been affected with epilepsy from three to six years. An improvement took place in all, and in no case did he use it "without effectually controlling the paroxysm in from 24 to 48 hours." His formula was: B. Zinci lactatis, gr. xxx.; Ext. Belladonnæ, gr. viii. M. ft. pil. x. Sig. One before each meal.

# Midwifery and Diseuses of Momen and Children.

## MORNING SICKNESS OF PREGNANCY.

This affection, which is so common as to be usually almost disregarded, becomes occasionally a source of great discomfort or even danger to the pregnant woman. The phenomenon, sometimes termed "sympathetic," would frequently appear to depend upon reflex secretion by the stomach of a large quantity of unduly acid gastric juice. The source of centripetal irritation being one which, in the ordinary course of things, we cannot remove or influence, it might naturally be expected that most benefit would be derivable from remedies which diminish the reflex

faculty of the central nervous system: and it will be noticed that, in the experience of the authorities whom we quote, sedative remedies are those which apparently met with most approval. Of all drugs, belladonna probably possesses the most power in diminishing reflex excitability. It might, perhaps, be well to try, in very troublesome cases, the subcutaneous injection of atropine in exceedingly minute doses.

# ST. BARTHOLOMEW'S HOSPITAL.

Dr. Greenhalgh states that vomiting during pregnancy may arise from a great variety of causes, but there is one form which comparatively few women escape, characterized by its early morning recurrence; the appetite being unimpaired; attended with little or no pain: in which glairy mucus, sometimes tinged with bile, is ejected, after much retching, and in which there are no evidences of disorder of the digestive functions. This form occurs more frequently and severely in those of a nervous or hysterical temperament: in those who have suffered from dysmenorrhea and other uterine ailments; in those in whom the mammary sympathies are well marked; in primiparæ; in twin gestation; and more frequently among the rich than the poor, owing probably to the more highly attuned state of the nervous system, and less active occupation of mind in the former. It usually commences about the sixth week, and terminates before the commencement of the fourth month (sympathetic); and it may again recur or commence near the end of pregnancy, owing to pressure of the uterus against the stomach (mechanical). It rarely occasions much inconvenience, but in some cases it is extremely severe, and, in exceptional cases, threatens and has led to the destruction of life; in which latter cases nearly and even the whole of the ingesta are vomited, giving rise to great emaciation, debility, and eventually to exhaustion. In the great majority of cases the opinion of the physician is not sought, but where the symptom is sufficiently severe and distressing to demand treatment, it is of the utmost importance that a correct diagnosis as to its cause be made. Much of the ill success is due to the empirical way in which this symptom is treated, and many failures are doubtless attributable to neglect on the part of the patient, who, under the impression that it is a necessary part of the pregnant state, and must consequently be borne does not apply for relief until the stomach has become so irritable as to resist the best assorted means. In four very severe cases, threatening life, which have come under Dr. Greenhalgh's care, two were due to highly congestive and irritable conditions of the uterus, one to retroversion, and one to dropsy of the amnion and twin gestation.

The plan of treatment which Dr. Greenhalgh has found most successful consists of rest in the semi-recumbent position, especially after meals,

which should consist of bland, nutritious, and unstimulating food, frequently administered, and in small quantities. The patient should take a little coffee about a quarter of an hour before rising, and should guard against long fasts. Great attention must be paid to the state of the bowels. In some cases a slight bandage round the lower ribs, and under this a strong sedative application over the epigastrum, appear to have done good. Effervéscents, with hydrocyanic acid, belladonna, or nux vomica, ice, and in some cases lemon juice, have proved useful. Bismuth and charcoal, where there have been large secretions of acrid mucus, accompanied with flatulent eructations, have appeared serviceable. But of all remedies Dr. Greenhalgh places most reliance upon the introduction into the vagina of morphia suppositories, more especially in severe cases, and where an irritable condition, with or without abrasion of the cervix uteri, is found to exist. In such cases he believes little or no reliance can be placed upon remedies taken by the mouth. which he has found rather to aggravate than relieve the vomiting. In the four cases especially alluded to, the first two were immediately relieved. and ultimately cured, by the suppositories; in the third the sickness abated shortly after the replacement of the uterus; while in the fourth, artificial premature labour at seven and a half months was successfully had resource to. Dr. Greenhalgh recommends from one and a half to two grains of morphia as the usual strength of the suppository; but in cases where there is abrasion, with little secretion, care should be taken against an overdose. Dr. Greenhalgh states that he has seen some remarkable cases illustrating the influence of the mind on the vomiting of pregnancy. A lady, reduced to a most alarming state of prostration by this symptom, was suddenly informed that her favourite child was dangerously ill with scarlatina. She at once, and against the most urgent remonstrances, left her bed; the sickness ceased, and she tended her child unremittingly night and day for many days without even one recurrence of vomiting. Some years ago he attended a milliner who suffered most severely from vomiting. She was pregnant, and for the first time, and with twins. No matter how severely she might be suffering, if summoned to see a customer, the vomiting immediately ceased and did not recur on that day. and the spectrum on the

## UNIVERSITY COLLEGE HOSPITAL.

The "morning sickness" of pregnancy, when limited to the morning or early part of the day, rarely calls for energetic or complicated medication. Under such circumstances Dr. Graily Hewitt generally finds benefit derivable from giving the patient some nourishing article of diet such as a teacupful of beef-tea, a small sandwich of meat, a cup of milk, etc., before raising the head from the pillow. The change of posture from the recumbent to the upright position appears to excite the attack when the stomach is empty, but not so much so when the attention of the organ is, so to speak, otherwise occupied. The patient should remain a few minutes or longer in bed after this early meal before attempting to rise. That the sickness will occur in spite of this in some cases is undeniable; but in very many instances Dr. Graily Hewitt finds notable relief given by the simple treatment just mentioned.

#### KING'S COLLEGE HOSPITAL.

Dr. Playfair is not in the habit of treating cases of "morning sickness" much, unless it is unusually severe, beyond carefully regulating the diet, and removing any obvious source of irritation to be met with in the primæ viæ themselves. He is of opinion that there is much truth in the old belief, that pregnancies without morning sickness are not, as a rule, favourable. He has so frequently noticed that when sickness is entirely absent other and more distreasing reflex phenomena, such as syncope, exist to an unusual degree, that he is disposed to look upon the entire absence of nausea as unfavourable.

When morning sickness is excessive he has frequently verified the opinion of Dr. Clay and others, that there is some morbid condition of the uterus itself, and has found local treatment, such as the occasional application of leeches to the vulva, or of iodine paint to erosions of the cervex uteri, to be of great service. With regard to actual medicines he is disposed to place most reliance on the oxalate of cerium, in doses of two grains three times a day. Next to this, effervescing draughts, with hydrocyanic acid, ice for suction ad libitum, and the subcutaneous injection of morphia, seem to have answered best. The pyroxylic spirity strongly recommended in a late volume of the "Obstetrical Transactions," has not been found to answer so well as was expected.

Dr. Playfair has not met with any of those aggravated cases in which the patient has been reduced to death's door from the exhaustion of constant vomiting. But in the event of the induction of labour being considered necessary for the safety of the patient, he would urge the performance of the operation before things had gone so far as to render recovery almost hopeless. He believes that failure of the operation in such instances may generally be traced to excessive delay.

## BRITISH LYING-IN HOSPITAL.

The vomiting of pregnancy, purely resulting from sympathetic irritation, and not due to ulceration or some morbid condition of the uterus

during gestation, has been treated by Dr. Murray in the following way. In the sickness occurring in the morning, and even before rising from bed, one teaspoonful of salvolatile in water has proved useful. When nausea occurs several times during the day, he recommends the use of sinapisms to the epigastric region, with a pill containing the oxalate of cerium and camphor, to be taken twice or thice daily. In one or two cases he has found the morning nausea and vomiting staved by getting the patient to eat either a biscuit or sandwich some time during the night, or very early in the morning. Salicine is a drug which he has used with success. Opium and ice are the other agents of much value in certain cases. In the cardialgia of pregnancy great attention must be paid to the diet, which should be light and nutritious, and a small quantity of food taken at a time, and at short intervals. He recommends lime-water, in preference to soda water; to be taken with almost every drink; and has found nitro-muriatic acid, with some bitter infusion, very useful.

# HOSPITAL FOR WOMEN, SOHO-SQUARE.

Dr. Meadows has found the greatest success from medicines which exercise a decidedly sedative action upon the nerves of the stomach. Regarding the sickness of pregnancy as a purely reflex effect of uterine irritation upon the pneumegastric nerves and solar plexus, Dr. Meadows places most reliance on drugs which diminish the sensibility of those nerves in their peripheral distribution. The tincture of aconite in five to ten minim doses, the tincture of belladonna in ten-minim doses, the liquid extract of opium in five-minim doses, of the dilute hydrocyanic acid in five-minim doses: one or other of these is the remedy which he most commonly and most successfully prescribes. He has also observed marked effects from the oxalate of cerium, or the citrate of bismuth, in five-grain doses. In very intractable cases he has sometimes tried with good effect a small blister, about the size of a florin, over the epigastric region, the blistered surface being afterwards dressed with some diluted ointment containing one grain of morphine in a drachm.—Luncet.

Sponge Tents.—Carbolized.—Sponge tents may be rendered incapable of putrefaction by introducing into the core of the tent several threads of cotton wick steeped in carbolic acid; and after the sponge is rolled into its proper shape, by immersing it into cocoa butter to which a certain quantity of glacial carbolic acid is added. The disinfectant properties of this agent completely protect the tents, and they are withdrawn in an inodorous state even after a stay of eighteen or twenty hours in the cervical canal.—Braithwaites Retrospect.

# Canada Medical Journal.

## MONTREAL, MAY, 1868.

We beg to intimate to our readers that we have secured the services of William Canniff M.D., M. R. C. S., England, who has kindly consented to act as corresponding Editor for the Province of Ontario. We are desirous of obtaining the co-operation of gentlemen from each of the Provinces in the Dominion so as to give to this work a national character and with that end in view have written to members of the profession in the Provinces of New Brunswick and Nova Scotia. Corresponding Editors are requested to secure from members of the profession in their immediate vicinity papers on practical subjects for publication in the pages of this journal. These papers should be forwarded to us before the 15th day of each month, to insure their appearances in the ensuing number. All manuscript sent addressed to the Editors Canada Medical Journal with a wrapper and having marked thereon "manuscript for the printer" will be transmitted by post, if pre-paid, at the same rate as that charged for news papers. Dr. Canniff's residence is at Belleville, Ontario.

#### THE NOTMAN ABORTION CASE.

Abortion is a crime, we believe of comparative rare occurrence in Canada, yet the discovery of a case now and again, proves that we are not entirely exempt. It is true our population has a horror of the crime, still it is a little surprising that with the United States so near to us, where the facilities afforded for its perpetration are so well known, that we have so little of it. Unfortunately our neighbors—the mass of them—do not look with that detestation upon abortion that we do, and it consequently has taken such deep root, as to have become a matter of grave concern to the Medical profession there. A volume on the diseases of women, by Professor Thomas of New York, issued this month, contains the somewhat startling announcement, that one of the most respectable newspapers of that city, one which finds its way into the first circles of society—contained in a recent issue no less than fifteen advertisements of well known professional abortionists—men and

women who make a business of infantile murder. The proprietors of these dens of infamy, also distribute broadcast over the country, circulars promising to communicate for a consideration the means whereby this crime can be accomplished safely. Under these circumstances we may congratulate ourselves, that thus far we have escaped being drawn completely into the current. But signs have not been wanting within the past year to shew that there were victims ready to submit if the operator could only be found, and it is with feelings of deep regret that we have to admit that at last, in Montreal, one of our profession was found willing to undertake the abominable business.

On the 21st of April, Mr. Robert Notman, a person of some social position, was placed in the dock at the Court of Queen's Bench in this city charged with having "counselled, commanded and procured one Dr. Alfred Patton, to administer to one Margaret Galbraith, on the 15th day of December, 1867, a certain noxious thing known as the Ergot of Rye," for the purpose of procuring abortion. The evidence as given by a number of witnesses was remarkably clear. The principal witness was the unfortunate Miss Galbraith, who gave her evidence, we believe honestly, although with much reluctance. She was a pupil in attendance at the Normal School, and had been seduced by Notman. Believing herself pregnant, Notman arranged with Dr. Alfred Patton to see her at his, Notman's, This interview between Dr. Patton and Miss Galbraith, took place on the 15th December, 1867, Notman being at that time in Toronto. Dr. Patton informed her she was pregnant, and gave her a bottle of medicine to take-which bottle was subsequently found in her trunk and was examined by Dr. Girdwood, who, on the trial gave it as his opinion from a microscopic examination of small particles taken from it, that it had contained Ergot of Rye. Several letters from Notman were read in which brief allusions were made to the treatment she was undergoing. To shew the intent of the prisoner, evidence not pertaining to the indictment upon which he was being tried (there were four other indictments against him) was admitted by Judge Drummond who presided. This evidence showed that finding the Ergot did not answer the purpose. other medicines were tried, all of which failed; that as a last resort sponge tents were used, and that on the evening of Saturday the 22nd February last, she was taken to the St. Lawrence Hall, where Dr. Patton shortly after arrived. He remained with her all night, and early on the Sunday morning she was delivered of a fœtus. What became of it Miss Galbraith did not know. Dr. Patton continued to attend her and saw her for the last time about midnight on the 26th of February. On the morning of the 27th Dr. Patton was found dead in his bed. An inquest was held, and a che-

mical analysis of the contents of the stomach made by Drs. Craik and Howard, revealed the fact that Prussic Acid was the cause of death. Dr. F. W. Campbell, who was called to attend Miss Galbraith on the 27th February, testified to finding her very ill, and on examination signs were present sufficiently well marked to warrant him in believing she had been recently delivered. Other witnesses gave evidence which completed the chain around the unfortunate prisoner. Notwithstanding most pathetic appeals to the jury, by two of the ablest criminal lawyers which Montreal possesses he was found guilty, and sentenced to ten years confinement in the Provincial Penitentiary. The case excited the greatest public interest, from the social position of the accused and the sad end of the unfortunate principal in the crime. Being fully cognizant of the facts we can but endorse the verdict of the jury, yet for all that we must add that we consider Judge Drummond has erred on the side of severity in the terrible sentence which he pronounced against the unfortunate prisoner. We are no apologists for the seducer, or the aider and abettor in the abominable crime of abortion, yet we know it for a fact that more than one person in Montreal occuppying a position equal to that of Notman's would have been to-day in a position similar to his had it not been for the warning given them of the crime they intended to commit, by the persons they sought to make the principal offenders. It is a fact we believe that there are few medical men, in Montreal at all events, who have not been at least once in their lives solicited to procure an abortion, the person so soliciting having no idea that he ran any risk worth speaking about it. A medical man does however, know not only the risk he runs, should he consent, but likewise is in a position to know the danger which he who "counsels and procures" is liable; not only is it his duty therefore to refuse to become a party to any such crime but likewise to warn those soliciting him to desist. While therefore a fearful responsibility rests upon the shoulders of the prisoner, Robert Notman, which we would by no means attempt to lighten, we yet think that the majesity of the law would have been satisfied with a sentence of from five to seven years, Dr. Patton whom we allude to above was a native of Ireland, and only began practice in Montreal early last fall. He had previously been for some time in the employ of the Montreal Ocean Steamship Company. We cannot close these remarks without one reflection. It is the regret we feel that the law of our country does not give us the power to prosecute mothers who in the crime of abortion, attempt to hide their shame. We trust that we shall not much longer have to complain of such a strange omission. May the publicity given to this trial have the effect of banishing from our country this moral cancer which was slowly eating its way into this and other cities of the Dominion.

#### CONVOCATION OF MCGILL UNIVERSITY.

The annual convocation of McGill College was held in the William Molson Hall of the University on Friday the 1st May, for the conferring of degrees and honours in the faculty of Arts: and on Saturday the 2nd May for conferring degrees in the faculties of Medicine and Law. On both occasions the room was graced by the presence of a number of ladies. Professor G. W. Campbell A.M., M.D. Dean, of the Medical Faculty made the following announcement of the steady progress of the Medical Faculty and also of honours and prizes awarded at the close of the past session—as follows.

The total number of Students in the past Session was 150—of these there were from Quebec, 64, Ontario, 74; Newfoundland, 2; Nova Scotia, 3; New Brunswick, 2; Prince Edward Island, 1; Bermuda, 1; United States, 3.

The number of Students who passed their Primary Examination, which includes Anatomy, Chemistry, Materia Medica, Institutes of Medicine, and Botany or Zoology, was 39, alphabetically arranged as follows:—

Thomas J. Alloway, Montreal, Que: Johnson Ardagh, Orillia, Ont: Thomas Archer, Montreal, Que; George A. Baynes, Montreal, Que; William Bradley, Fenagh Vale, Ont: John M. C. Buckle, Ottawa, Ont; George J Bull, Montreal, Que; John Campbell, Farquhar, Ont; William Cherry, Lennoxville, Ont; Victor A Clement, St. Guillaume, Que; Sidney P Cooke, Ottawa, Ont; Charles Dansereau, Vercheres, Que: William G. Farewell, Oshawa, Ont; John T. Finnie, Montreal, Que; William S Freleigh, Picton, Ont; Donald M. Fraser, London, Ont; Robert Gordon, Osnabruck, Ont; Charles S Hamilton, Roslin, Ont; James H. Hammond, Montreal, Que; Andrew Harkness, Matilda, Ont; William M. Keefer, Galt, Ont; John G. Kittson, Minnesota, U. S. Thomas D. Lucas, Wellington, Ont; D. A. MacCrimmon, Lagan, Ont. James Macfie, Clarenceville, Que; Peter MacLaren, New Perth, P. E. I; John Mackay, South Finch, Ont; Alexander McTaggart, East Williams, Ont; William H Mondelet, Montreal, Que; D. A Morrison, Montreal, Que; Alexander Proudfoot, South Hampton, Ont; John Reid London, Ont; Ferdinand Rinfret, Quebec, Que; Thomas A. Rodgers, Montreal, Que; David T. Scholfield, Ponthill, Ont; Norman A. Smith, Frelighsburg, Que, James Stewart, Ottawa, Ont; Silas E. Tabb, Montreal. Que; Joseph A. Whyte, Charleston, S. C.

The following are the names of Students presented for the Degree of M. D, C. M., their residences, and the subjects of their Theses.

Edwin D Ault, Aultsville, Ont, Hysteria.; D. S. E., Bain, Staff Surgeon Major, Quebec, Yellow Fever; John A. Burgess, Chatsworth,

Ont. Empyema.; Clarence J. H. Chipman, B. A., Montreal, Que, Infantile Cholera.: Guy D. F. Daly, St. Paul Min., U. S. Aneurism.: T. B. DeGrosbois, Chambly, Que, Cataract.; William G. Farewell, Oshawa, Ont, Induction of Premature Labor.; Donald Fraser, Montreal, Que, Small nox.: Angus Gilmour, Granby, Que, Physiological Chemistry of Urine; Robert Gordon, Osnabruck, Ont, Pyogenic Fever; Dan. M.J. Hagarty Bornholm, Ont, Scarlatina; Charles S. Hamilton, Roslin, Ont, Pneumonia; F. W. Harding, Windsor, N. S. Tobacco; John Hollwell, Quebec, Que, Gunshot Wounds; Reginald, H. A. King, St, Silvestre, One. Physiological relations of the Blood.; D. W. C. Law, Newton Robinson, Ont.; Amemorrhæa.; Daniel Legault, Isle Perrault, Que. Dyspensia: Walter Moffatt, Hickory, Pennsylvania, Jaundice; Wm. H. Mondelet, Montreal, Que, Principal Causes of the Mortality of Montreal and Modes of Prevention; James A. Nesbitt, Hemmingford, Que. Pneumonia; Charles Williams I'adfield, Burford, Ont., Physiology, and Pathology of the Blood; John Perrier, Halifax, N. S., Dysentery; John S. Proudfoot, Chatsworth, Ont. Acute Pneumonia; James J. Quarry, Lucan, Ont, Dysentery; Ferdinand R. Rinfret, Quebec, Que, Scarlatina. Thomas G. Roddick, Harbor Grace Nfld, Fractures of the Femur; John R. Smallwood, Montreal, Que, Traumatic Tetanus; Daniel D. Smith, Cornwall, Ont, Disease of the Valves of the Heart; George Stanton, Simcoe, Ont, Acute Peritonitis; Alfred O. Stimpson, St. Pie, Que, Relations of Chemistry to Medicine; Marshall B. Willcox, Whitby, Ont, Stricture of the Urethra, John A. Wye Brantford, Rubeola.,

#### PRIZES

The Medical Faculty Prizes consist first of the Holmes Gold Medal, founded by the Faculty in honour of their late Dean, and two prizes in Books for the best Primary and best Final Graduation Examination.

The Holmes Medal was gained by Thomas George Roddick of Newfoundland, after a close competition with Guy D. F. Daly of St. Pauls Minnesota, and Clarence Chipman, B. A. of Montreal.

The Prize for the best examination in the Final Branches, was awarded to Thomas George Roddick; and in the Primary Branch to Andrew Harkness of Matilda, Ont.

The gentlemen whose Theses and Examinations were considered sufficiently meritorious to entitle them to compete for the Medal, were Messrs. Daly, Wilcox, Chipman, Burgess, Ault, Stanton, Quarry, Perrier, and Gilmour.

The gentlemen who deserve Honourable Mention in the Primary examinations were Messrs. Lucas, Cherry, Reid, Stewart, Bull, MacLaren,

and Kittson; the names in the above list are arranged in the order of merit.

The Prizes in Natural History were awarded as follows:

BOTANY-Austin T. Pegg, Prize; G. H. DeWolfe, F. W. Faulkner, W. Youker, Certificates of very creditable answering.

ZOOLOGY-T. M. Clunn, Prize; Sidney P. Cook, Prize for Collection of Shells.

## IN PRACTICAL ANATOMY .- DEMONSTRATORS' PRIZE,

Senior Class.—For general excellence as a practical anatomist, prize awarded to William Sutherland.

Junior Class.—Prize divided between A. J. Cattanach and R. A. Clarke.

# STUDENTS WHO HAVE PASSED THEIR EXAMINATION IN NATURAL HISTORY.

Class First.—Botany.—Austin J. Pegg. G. H. H. DeWolfe, G. W. Faulkner, Wm. Youker, H. P. Wright, R. A. Clarke, R. T. Rooney, John McKay, A. J. Cattanach.

Class 2nd.—G. W. Whelan, F. R. Clunn, A. J. Abott, F. McEwen, N. H. Sutcliffe, J. C. Barclay, James Fraser, J. S. Webb, F. H. Mitchell, F. F. D'Avignon, A. A. Clarke, Thos F. Johnson, James Cherry, John Duncan, T. J. Alloway.

Class 3rd.--J: M. Macdonald., T. D. Schofield, W. D. E. Nelson, D. Cluness, Robert Moore.

Zoology.---F. R. Clunn, Alfred Brosnau, G. H. DeWolfe, W. D. E. Nelson.

The Chancellor, the Hon. Charles Duey Day, LL.D., then presented the Holmes gold medal to Mr. Roddick, and to the other students the prizes as detailed in the above list. The solemn vow having been administered to the graduating class by Professor William Wright M.D. the degree of Doctor of Medicine and Master of Surgery, was thereupon conferred by Principal Dawson.

Dr. Thomas G. Roddick then read an excellent valedictory address on behalf of the graduating class.

Professor Wright then addressed the graduates on behalf of the Medical Faculty; this able address will be found elsewhere. After the proceedings of the Law Faculty and an address from the Chancellor, the benediction was pronounced by Professor Cornish and the proceedings terminated.

#### DR. DIEHL OF TORONTO.

Dr. Diehl, formerly a practitioner in Toronto, and the oldest man in that city, died on the 6th of March at the age of 82 years.

He was born in Quebec in 1786, and studied medicine with Dr. Blake in Montreal, and in 1813 was attached to the medical staff of a Canadian regiment, and served during the war. Fron 1818 to 1828 he practised with the late Dr. Arnoldi in Montreal, when he removed to Toronto, where he entered into partnership with the late Dr. Widner, remaining till 1835, when on account of ill-health he gave up practice. He was afterwards appointed Deputy Inspector of Militia Hospitals in Toronto, and surgeon of the 4th Battalion of Militia. He was very active, mentally and physically, until a few weeks previous to his decease, when he received some internal injury by a fall which eventually caused his death,

#### CHEMISTS ASSOCIATION MONTREAL.

We congratulate the Chemists and Druggists of Montreal, upon the vitality they have given their Association, formed last fall,—during the past winter, their meetings have been well attended, and interesting essays have been read. At the meeting held on the 5th of March, Mr. T. D. Reed, read a very interesting paper on Glycerine, which was an all, but an exhaustive treatise. We shall be happy at all times to briefly chronicle the doings of this association.

#### CANADIAN GRADUATES AT HOME.

By the Lancet we notice that the undermentioned Canadian Graduates took out the membership of the Royal College of Surgeons of England, on the dates given.

Edward K. Patton, M. D. of Quebec (McGill and Laval) on the 23rd January. David Keagey M. D. of Dundas, Ontario (Victoria College, Toronto.) Hugh McKay, M. D. of Woodstock Ontario, (Victoria College, Toronto). Duncan McLarty, M. D. of St. Thomas, Ontario. (Victoria College, Toronto.) The last three passed their examination on the 21st January last.

#### UNIVERSITY OF McGILL COLLEGE.

Dr. Duncan C. MacCallum, formerly Professor of Medical Jurisprudence, has been elected by the Governors of the University, to fill the Chair of Professor of Obstetrics, and the Diseases of Women and Children, vacant by the death of Dr. Archibald Hall. We congratulate Dr. MacCallum upon his appointment.

### CANADA

# MEDICAL JOURNAL

### ORIGINAL COMMUNICATIONS.

An Essay on the Contagion, Infection, Portability, and Communicability of the Asiatic Cholera in its relations to Quarantine; with a brief History of its Origin and Course in Canada, from 1832. By W. Marsden, M.D., ex-President and Governor of the College of Physicians and Surgeons, Canada East; Honorary Fellow Medico-Botanical Society, London; Corresponding Fellow Medical Society, London; Honorary Fellow Montreal Pathological Society; Honorary Fellow Berkshire Medical Society and Lyceum Natural History; Honorary Fellow Medico-Chirurgical Society, New York; Member by Invitation of the American Association, &c., &c., &c.

A synopsis of the following Essay was laid before the American Medical Association at its annual meeting, held in Cincinnati, Ohio, in May, 1867.

My chief object in this Essay, is to bring within the reach of the members of the medical profession authentic data connected with what must ever be an important epoch in the medical history of this continent; and I have been induced to publish it from the fact that, statements connected with the history and progress of Asiatic Cholera, since its first introduction into Canada, have from time to time found their way into print, and been received as reliable data, many of which were mere fictions, and others exaggerations and misrepresentations. I therefore determined to describe some of the events and scenes in which I have been an active participator, and submit the record of a living witness; a kind of evidence that must daily become more valuable and interesting as time rolls on, and we examine such testimony from a greater distance.

To the medical gentlemen, both in this Dominion and in the United States, who have kindly responded to my appeal for facts connected with this subject, I return my most sincere and grateful thanks.

That fell fiend, and until very recently, almost intractable scourge, Asiatic Cholera, first set its deadly foot-print on the American continent at Quebec, in Lower Canada, on the 8th of June, 1832, whence it extended its ravages with the tide of "human travel and human traffic" in every direction, sowing the seeds of misery and ruin, and reaping a fruitful harvest of desolation and death.

I had the honour to submit a plan of Quarantine for Asiatic Cholera, which I originated in 1856, to the resident physician of New York, Lewis A. Sayre, M.D., in the autumn of 1865; of which he says in his annual report, presented 4th January, 1866: "The plan of Quarantine suggested by Dr. Marsden, with some slight modifications, is the most perfect I have yet seen that could be adopted; and I would earnestly recommend the Government to adopt it as a uniformity along the entire coast." That plan which has since received the endorsement and approval of the entire United States of America, including the Surgeon General and Army Medical Staff, and the leading physicians and surgeons of the Union, is declared to be "the most perfect system of Quarantine yet known," and is founded on the assumption that Asiatic Cholera is an infectious, portable, and communicable disease, and can be communicated and transmitted, both by persons and personal effects and is therefore a controllable disease.

My opinions on this subject are founded on my own experience and observations, which commenced with the first case of the pestilence that appeared on this continent, and extended over six separate and distinct visitations.

The result of that experience is, an indelible conviction that Asiatic Cholera is not endemic in Europe or America; but is an exotic, having its origin in India, where only it is endemic and indigenous, and whence it has constantly been imported into Europe and America by persons and personal effects tainted by its deadly poison; and that its progress can be arrested by an efficient and uniform system of Quarantine, whether on sea or land, and its infectious properties can be destroyed by proper chemical agents.

[Since I commenced this paper, the Metropolitan Board of Health of New York, has demonstrated the soundness of my principles; and internal Quarantine, or as it is expressively called "stamping out," has become a fait accompli. To Elisha Harris, M.D., Registrar of Vital Statistics, belongs the honour of having been the first to carry this successful practice into operation in America.]

One of the gravest errors into which a physician can fall, and one calculated to lead him into fatal mistakes, is the confounding sporadic or

common cholera, or cholera morbus, (which is common to every country and every clime,) with Asiatic cholera; and which Kennedy most properly calls "the contagious cholera,"

So identical are the symptoms and characteristics of these two distinct varieties of diseased action, having a common name, and in malignant cases, a common termination—a sudden and hideous death, that it is extremely difficult, if not impossible, to diagnose accurately and at once between them, unless you accept the doctrine of contagion.

Common cholera or cholera morbus never becomes epidemic, but consists of isolated cases, often of very malignant type, and occasionally resulting in death; whereas the Indian or Asiatic variety being once sown, spreads from person to person, and from place to place; exactly in proportion to the nature of the intercommunication between the sick and healthy, the extent and character of the exposure to the disease, and the susceptibility of the persons exposed. Wherever the pestilence has appeared in point of time, to have been communicated from a continent to an island, or from an island to a continent, or from one continent to another, or from one part of a country to another, the same strong evidence of contagion or infection is still developed, as first marked its progress throughout India, and the Indian Ocean. In England it first appeared at a seaport town which had frequent intercourse with the Baltic, and on this continent it first appeared at Quebec, which had maintained frequent intercourse with the three kingdoms, as I will show hereafter.

A definition of the meaning intended to be conveyed by the term contagious is essential to the proper understanding of this subject, no less to the pathologist than the physiologist. The latter, stickling for the literal meaning of the derivative of con and tango, insists on absolute contact to propagate disease. This is not the sense in which the term ought to be used in reference to Asiatic cholera. On that account, it is that I have used the term infectious in preference to contagious, the disease being transmissible from individual to individual through the medium of the atmosphere at a very limited distance,—say a few feet,—without personal contact. Now, although contagion comprehends infection in the general acceptation of the term, and signifies the transmission of disease from one person to another, by direct or indirect contact, I generally apply the term infection to Asiatic cholera, because the disease is reproduced and communicated by the approximation of persons or effects tainted, poisoned or infected, by the pestilence without actual contact.

"Kennedy," in the preface to his admirable work on the History of the Contagious Cholera remarks on this subject,—The variety of Indian Cholera under consideration has had several names assigned to it, as the "epidemic cholera," the "spasmodic cholera," the "epidemic spasmodic cholera," "cholera asphyxia," the "malignant cholera," &c. It matters little what name is bestowed upon a disease, provided the name leads to a knowledge of its identity; none of the preceding, however, seem sufficiently expressive for that purpose. In India, the species of cholera to which this variety belongs, had existence from the earliest ages, and, occasionally, had prevailed to a great extent, in an exceedingly virulent form, even previous to the year 1817; during these periods, some, or all of the above names, might very well apply; but, in 1817, the disease assumed a contagious property, which there is no evidence to prove it ever before possessed; and a name was then wanting to distinguish the new variety. Writers convinced of its propriety, have abstained from using the title "contagious cholera," in deference to the opposition of the non-contagionists." With every respect for the ability displayed in this opposition, I cannot pursue a similar course. My defence must rest on the facts adduced in favour of contagion, and the common practice, in physical philosophy, of adopting the hypothesis which best explains the phenomena.

So much has been said and written on the subject of cholera, and especially on its character and treatment, that it is my intention in the following essay, to confine myself entirely to the consideration of the abstract question of contagion or infection, in reference to its bearings upon Quarantine. In doing so, I intend to deal with facts, and present them to you properly attested, leaving you to interpret them at your leisure, and in your own way, as I do not intend to extract from the countless volumes of published evidence that is is already within your reach, but will cull fresh cases from my note-books, and other authentic unpublished sources, within my reach.

On each of the six invasions of Asiatic Cholera with which Lower Canada has been visited, I have been enabled personally to trace the earliest cases of the disease to importation, and its subsequent extension to uninterrupted intercourse between the sick and healthy, and to a want of a proper system of Quarantine.

Among the inaccurate statements connected with the origin of Asiatic Cholera on this continent, I find the following in Dr. Milroy's Report to the Colonial Office, on the Cholera Epidemic in Jamaica, 1840—51; and printed by order of the House of Commons, on the 11th May, 1854.

"In the first visitation of Cholera, in 1832, in the New World, it has been very generally believed that the earliest cases occurred at Quebec, in Lower Canada, about the beginning of June in that year. They have

been confidently ascribed by some writers to direct and traceable importation by vessels from Europe, but this point is far from having been distintly made out, and Dr. Douglas, the medical officer at the Quarantine station at Grosse Isle, informed me that he has serious doubts upon its accuracy."

The gentleman whose authority Dr. Milroy cites was not at the time referred to, a medical officer at Grosse Isle at all, nor was he then in the Province; therefore, any thing he said on that subject was mere hearsay, and not in accordance with the facts, which leave no doubt on the minds of unprejudiced persons that Cholera was introduced into America through Quebec, and was "traceable to importation." The first case of Asiatic Cholera on this continent occurred at Quebec, in Lower Canada, on the 8th June, 1832, in the person of an Irish emigrant. Two vessels, the "Elizabeth" from Dublin, and the "Carricks" from the same place, arrived at the Quarantine station, Grosse Isle; the former on the twenty-eighth of May, with 200 passengers, having had twenty-two deaths from Cholera on the voyage; and the latter, on the third of June, with 145 passengers, having lost forty-two from Cholera in fifteen days. I say "from Cholera," although the report of the Boarding Officer was from some "unknown disease." Yet the vessel having come from a port known to be infected, and a case of Cholera having occurred after the arrival of the vessel at the Quarantine station, which proved fatal in three hours, there can be no manner of doubt as to the nature of the "unknown disease." There was at that time no proper system of Quarantine, no separation of passengers from Cholera vessels, and other ships. The only separation consisted in removing those actually sick from among those who continued apparently healthy, and who were at once sent on their journey.

Constant and uninterrupted intercourse was permitted between the Quarantine station and the city, by boats and steamers; and passenger steamers were even permitted to proceed to Grosse Isle, and take passengers direct to Quebec and Montreal. The unusual number of 7151 emigrants had arrived in the harbour of Quebec from the Grosse Isle Quarantine station between the second and the fifth of June, all of whom had been more or less subjected to exposure and contact with the infected; and whatever might have been thought of such a system of Quarantine at that time, (a mere rope often being the only means used to separate passengers from each other) it would surprise no one in the present advanced state of our knowledge on this subject, that Cholera had "overleaped the bounds," (to use a favourite phrase of the non-contagionists), of such a system of Quarantine.

The history of the British barque "Brutus," from Liverpool, with 330

passengers, is highly interesting in reference to this visitation. It appears by the letter of W. W. Thompson, M.R.C.S.L., the surgeon of the vessel, that cholera broke out on board about eight days after leaving the river Mersey, which induced the captain to put back. It also appears from this letter that between the 27th of May, when the first person was attacked, and the 13th of June, the day on which the vessel arrived at Liverpool, 117 cases had occurred, with 81 deaths and 20 recoveries. Had the "Brutus" been less severely visited, the captain would, no doubt, have held on to his destined port, and the passengers for their own sakes would have spoken of the occurrence of cholera on board their vessel as little as possible, and so the matter would have been hushed up. The occurrence of 81 deaths at sea, among 330 persons on board the same vessel, cannot be accounted for, says the eminent authority Graves, unless on the supposition that the disease is contagious, and he adds, "one such positive fact is worth a volume of negative evidence"

On Thursday, the 7th of June, the steamer "Voyageur," of Montreal, Captain Morin, left the Quarantine station with an enormous number of passengers for Montreal, and when about nine miles above Quebec was found to be so dangerously overloaded, that she was compelled to put back during the night, and re-land 200 passengers. She proceeded next morning on her voyage, and cholera broke out on board, on her trip up to Montreal, and several deaths took place on the passage.

Before arriving at Three Rivers, an emigrant named Kerr was taken ill, and died before the vessel came into the Port of Montreal. Another emigrant named McKee had been seized on the afternoon of the same day (9th June), and was taken from the boat to a tavern on the wharf. The body of Kerr was exposed and visited by numbers of persons, (as also McKee's,) at the tavern. A soldier from the barracks visited and assisted in rubbing his body, and was among the first victims, and the first soldier in the garrison who died. It was reported at the time that some dead bodies were thrown into the river from the steamer "Voyageur" on going up, but this fact was never authenticated. However, after the vessel passed Sorel, a feather-bed belonging to a passenger, who had died of cholera, was thrown overboard, a man named Latour, who lived on one of the small islands in the vicinity, saw it, and going out in a canoe, took it up and carried home his prize, and hung it up to dry. He took cholera immediately, and died in twelve hours. His wife also took the disease and died.

A poor fisherman who lived at the village of Contrecœur, a little below Montreal, was out fishing in his canoe, when a raft came floating past. The captain of the raft asked the old man to take one of his men ashore, who had died, and bury him. He had not heard about the Cholera, took the body ashore, and buried it. During the same night he took ill and died. His wife also sickened; and people passing by on Sunday morning, and seeing the house shut up, mentioned the fact to his nephew, whom they met at the parish church. Going to his uncle's house, he found his uncle dead, and his aunt dying. After doing his duty by his relatives, he went home to the second concession, where he took ill, and died. There were no other cases between these two points several miles apart.

A Canadian drover from William Henry left that place, where there had been a few cases of Cholera, to go to the Eastern Townships. His way lay through the unsettled forest for several miles. In the centre of this lay one of the way-side taverns, and was the only house in the forest. He arrived about midnight, rested, and took some refreshment, and in a couple of hours proceeded on his journey. The next day the tavern-keeper was attacked, and soon after his wife, and both of them died.

The history of such cases as the foregoing, together with the following, which I read in a Maine local paper in the early part of 1833, first awakened my suspicions to the possible contagion of Asiatic Cholera, and the reading of Kennedy's unanswerable work on the "Contagious Cholera" confirmed my impressions, that non-contagion was a dangerous and fatal doctrine.

A sailor belonging to the State of Maine died of Asiatic Cholera in 1832, in a northern European port in the Baltic, where Cholera prevailed. A chest containing his clothing and personal effects were sent home to his relations, who lived in a small straggling village on the Atlantic Coast, near Bangor, Me. It arrived about Christmas, 1832, and was opened immediately on its arrival. The inmates all remarked a peculiar heavy odour in opening the chest, and soon after began one by one to sicken, when the whole were within a few hours hurried into eternity by a disease resembling Asiatic Cholera in all its malignity. There had been no Cholera in the State previous to this, nor was there any after, until 1834. This last case is attested by Professor R. D. Mussey, late of Boston and now of Cincinnati, Ohio.

Let us now return to the steamer Voyageur.

A man who landed from her, died on the wharf on Saturday night, the ninth of June, in Montreal. Several other cases took place on the wharf, as well as in lodging-houses in the neighbourhood, and the disease spread rapidly.

Of the passengers who returned and remained in Quebec on Thursday night, a number went to the lodging-house of one Roche, in Champlain street, where cholera broke out violently. Fifty-six persons died of Cholera, in this one house, during the season of 1832.

In most of the early cases of Cholera in Montreal, communication could be traced with Kerr and McKee, and the other passengers of the steamer "Voyageur." On the 11th, several new cases occurred, and a continued and regular increase took place until the 19th. From Montreal we next trace the disease West and South. It appeared at Lachine on the 11th, among emigrants from Montreal on their way to Upper Canada, on the 13th it reached the Cascades in the person of a clergyman from Montreal, who died at Côteau du Lac. On the same day a boatman direct from Montreal died of Cholera at Cornwall. On the 16th, it reached Prescott, the first case being from Montreal. On the 18th, a boatman from Montreal died at Brockville. On the 20th, it arrived at Kingston. On the 21st, the first case occurred at little York, now Toronto. The victim was a merchant tailor from Montreal, who had fled from fear of the pestilence. On the 22nd a vessel from Kingston, called the "Massasunga Chief," with 200 emigrants on board, arrived off the town of Niagara, but having Cholera on board, was not allowed to come into port, and Cholera did not get then into Niagara. Here we have conclusive evidence of propagation by man in exact proportion to the rapidity of his movements.

I will mention another fact of an official character connected with the garrison, which tells against the epidemic or atmospheric theory: "The garrison of Montreal, consisted of a portion of two regiments, in all 450 men, of whom 46 died of cholera previous to the 19th of June. Under orders from the Army Medical Department, the men were then removed and encamped under canvas on the Island of St. Helen's, near and opposite to the city. Strict non-intercourse was maintained, and the result was, that no more deaths occurred, although the city was decimated, and steamers were daily passing close to the Island, freighted with the sick and dying." In the same category, I may mention, "on official authority," that under an order of the Government, the Troops at Newcastle Sunderland, Edinburgh, and Glasgow, where cholera prevailed in 1831 and 1832, were confined to their quarters, and no communication or intercourse permitted with the citizens, and not a case of cholera occurred among them.

The disease then spread in a westerly direction along the course of the St. Lawrence to Montreal, but did not appear at any of the intermediate places where no landing or communication had taken place; thence to Upper Canada, and to the North-Western States of the American Union; and at the same time by Lake Champlain in a southerly direction to New York, Philadelphia, and other cities in the United States, till it reached New Orleans in the extreme South.

Having said that it did not attack any intermediate place between Quebec and Montreal where no passengers were permitted to land, I may mention that whilst these two cities were decimated the town of Three Rivers, equi-distant from each city, where steamers touched both ways daily, escaped entirely in 1832, by establishing a system of non-intercourse, and not allowing a solitary passenger to land there till the disease had subsided. Can this extraordinary exemption from the pestilence be accounted for excepting on the principle of contagion.

To be continued.

A case of Phlegmonoid Erysipelas commencing in the structures surrounding the Cœcum. By G. A. McCallum, M.D., Dunville, Ont.

J. H., æt. 60, the subject of the following rather interesting case, had been for some time previous to his present illness in a debilitated condition from frequent attacks of diarrhea. April 5th, he was seized with severe rigours, followed by acute pain in the abdomen. He had throughout the day been complaining of some pain through the bowels, and on going to bed at night the chills commenced. After they had subsided, the pain was exceedingly severe; medical aid was obtained; and under the use of opiates and fomentations, the patient became easy; he was then ordered a purgative of turpentine and castor oil; however, as soon as the effect of the opiates wore off, the pain was still complained of, but more particularly now in the right inguinal region. His attendant next put him on a course of mercury, with counter-irritation over the tenderness, and this treatment was continued without benefit until the 19th, when I was called to see the case. It then presented the following symptoms—the patient was very weak and emaciated; pulse 100, small and feeble; complete loss of appetite; tongue coated; bowels constipated, and the urine high coloured; in the right inguinal region there was considerable tympanitis, which did not extend over the rest of the abdomen, it appeared as if the cacum was distended with flatus; under deep pressure in the lower part of this region there was a good deal of tenderness, but I could discover nothing like a tumour; the pain was very much increased by moving the leg. Ptyalism had by this time been produced without any alleviation of the symptoms, and there was every indication for an opposite line of treatment; accordingly the calomel and opium were discontinued, and tinct. ferri chloridi and quinine with brandy, and beef tea, ordered in their stead, flax-seed poultices to be applied over the pain, and to have 1 gr. doses of morph. sulph. to procure rest.

24th.—Not much improved, although he finds the poultices grateful, and is enabled to sleep pretty well at night under the influence of the morphia; has a sallow, anxious countenance; pulse still about 100, but very small; tongue coated with dark fur; and the lips and teeth with sordes; there is not much swelling in the right inguinal region, not so tympanitic, but the tenderness is about the same. On examining more closely, a resonant point was found below Poupart's ligament, apparently in the femoral canal; this was very tender under pressure and when he coughed. Treatment continued.

25th.—General symptoms about the same; the resonant tumour below Poupart's ligament, yesterday and last night, was very painful; had a poor night's rest; however, towards morning he became easier, and on taking off the poultice in the morning it was discovered that the whole thigh, but especially the anterior surface, was very much swollen; cedematous tympanitic, and except a space in Scarpa's triangle, which was very tender, the sensation was almost nil. Not so much tenderness above Poupart's ligament now. Treatment continued; ordered castor oil to move his bowels, as he had not had a passage since the 19th.

28th.—To-day my friend Dr. Mulvaney of H. M. gun-boat Britomart, saw the patient with me. We found him exceedingly low; the oil had not operated until yesterday, emptying the bowels of a quantity of dark scybalæ, but as its action seemed inclined to continue and causing a great deal of pain in the region of the execum, the diarrhæa and pain were allayed by opiates. The thigh now showed a blush of redness on its anterior surface, was quite tympanitic and very tender over a large extent of surface. At one point, about the junction of the upper with the middle third, it appeared somewhat boggy. A free incision was accordingly made into it; nothing but a sanious fluid escaped. Treatment continued, except that the brandy was increased from  $\frac{\pi}{2}$  iv to  $\frac{\pi}{2}$  vi per diem.

29th. Diarrhea commenced again, and motions passed involuntarily, and to-day heetic symptoms have set in; a little pus was discovered about the edges of the wound, and small bubbles of fetid gas were escaping; this accounts for the resonant tumour below Poupart's ligament and the resonance over the thigh. A point higher up and more external, was found to be boggy, made an incision into it with the same result as before. Treatment continued.

30th. Pulse to-day very small and frequent, sweating profusely, &c., the opening in the thigh discharging freely a thin, dark-colored, very fetid pus, bubbles of gas with an odour feculent in character, are constantly escaping from the wounds and rendering the atmosphere of the

room almost intolerable. Still continued the iron and quinine with plenty of brandy and beef tea, and ordered a solution of permanganate of potash, as a disinfectant, to be sprinkled on the poultices and about the bed.

May 1st. To-day the whole integument on the anterior part of the thigh, from a short distance below Poupart's ligament to near the knee, seems to be loose from the muscles beneath, and when pressure is made above Poupart's ligament the flow of pus and escape of gas is very much increased, showing a communication; his pulse is rather better, as is also his general appearance; large portions of cellular tissue are sloughing away; the tenderness above Poupart's ligament has almost disappeared; made another incision at the most dependent part of the diseased tissues, and allowed of the free exit of a quantity of pus which had collected there. Treatment continued.

3rd.—Much better to-day; looks brighter and feels stronger; hectic symptoms diminishing; discharge from the incisions very profuse, but less fetid and more healthy in character. Continued treatment, and bandaged from the toes up to the incisions.

5th.—Still improving; heetic symptoms nearly gone; appetite middling, and strength improving generally. Treatment continued.

9th.—Able to sit up in bed; considerable discharge from the cuts yet, but the pus is laudable; has no pain anywhere, and is on a fair way to recovery.

This case presents many interesting points, the disease occurring, as it did, in a person debilitated by previous frequent attacks of diarrhæa was necessarily of an asthenic character from the beginning, and owing to its seat and peculiar course, renders the recovery rather remarkable.

It was evidently not a peritocecal abscess, from the fact that it had no tendency to point anywhere; the unhealthy inflammation, where we could see its action, as in the thigh, was inclined to spread rapidly; and large masses of dead cellular tissue were thrown off through the free incisions made. I am confident that it is to the free incisions and strong supporting treatment that the patient owes his life.

Case of Acute Rheumatism.—Pericarditis—Effusion on the Brain and death by Coma. Under the care of Geo. E. Fenwick, M.D., Prof. of Clinical Surgery, McGill University. Reported by Geo. Ross, A.M, M.D., House Surgeon, Montreal General Hospital.

Martha L., aged 26, was admitted into the Montreal General Hospital on the 26th of March, 1868, suffering from acute rheumatism.

The joints principally affected on admission were the ankles and the left knee. She has had one previous attack of the disease but was not aware of her heart having been then affected. There was to be heard at the base of the heart and for some distance along the course of the aorta, a soft, blowing systolic murmur; the action of the heart was quite regular and not at all excited, and there was no precordial pain; it was, therefore, thought that the murmur had probably existed prior to this attack.

She was immediately ordered the following treatment:

Haustus Niger, horâ somni sumend. and R. Potass Bicarbon 3 vj. Aquæ 3 xij. capt. coch: mag. duo secundâ quâque hora, together with extra beef-tea and milk. The joints to be swathed in cotton wadding and oil-silk. Under this management the case prospered favourably until the 1st of April, when the pulse rose somewhat in frequency and there was some slight pain and oppression in the precordia complained of. The pain and swelling had now almost completely left the lower extremities and had shifted to the elbows and wrists. On this day auscultation discovered an indistinct friction sound over the heart, but it could not be found to exist with the second sound, though sufficiently recognizable with the first.

April 2nd. Not so well to-day—pulse 110, tongue somewhat dry; complains of thirst; friction sound of the same character, but more distinct. No other joints affected, but the swelling remains unaltered in those previously inflamed. Omit the former medicine R. Acid Nitro-muriatici dil 3 iv. Aquæ 3 vi. capt. coch. mag. quartâ quâque horâ, and also R. Hyd. Submur. gr. ij. Pulv opii gr. 4 quartâ quâque horâ—to be taken alternately.

April 3rd.—At noon to-day, the hour of visit, the patient expressed herself as feeling much better; had slept well and the expression of distress had quite disappeared from the face; tongue somewhat moister but slightly furred, and thirst less—pulse about 100—friction sound as yesterday. About 2 p.m., I was summoned by the nurse of the ward to see her, as she seemed suddenly much worse, and was said to be not quite "right in her head." On enquiry I found that for some time after the visit she had apparently dozed quietly, when she awoke and began talking incoherently and counting imaginary numbers on the wall. She appeared, however, when I saw her, rational enough, and answered me that she felt considerable pain in the chest. The pulse was now 145 and the respiration very rapid; on putting my stethoscope to the heart I found the heart's action very much increased in force, and the friction murmur exceedingly intensified. I ordered a large mustard plaster over the heart. At 3.30 p.m., saw her again with Dr. Drake, the house sur-

geon. She had now lapsed rapidly into a state of insensibility, from which she could only be partially aroused by a loud question or rough shaking, but could answer nothing—the pupils were strongly contracted and insensible to light; pulse 100; skin perspiring freely, and warm; respirations slower but no stertor; no vomiting and no especial heat of head. A messenger was at once despatched for Dr. Fenwick, but before his arrival, viz., at 5 p.m., she expired. The condition of profound coma remained until the end. When the insensibility was first noticed with the contracted pupil, narcotism was suspected, but on investigating we found that since 5 p.m. the evening before, she had taken but four of the powders, which would amount to only two grains of opium in all, in 22 hours, which rendered that suspicion nugatory.

Autopsy. Twenty hours after death. The Brain was first examined. The sinuses of the dura mater were found filled with exceedingly dark but tolerably fluid blood; the cerebrum itself, however, presented no especial marks of congestion. In the sac of the arachnoid was a considerable effusion of serum. The vessels of the pia mater were all intensely congested. The ventricles of the brain were found filled with clear transparent serum, in which floated the large and over distended choroid plexuses: the amount of serum could not have been less then two ounces. The base of the brain appeared healthy.

On opening the chest there were found to exist extensive and tolerably recent adhesions between the pericardium and the pleuræ of both lungs. The opposed surfaces of the pericardium were strongly adherent at the apex of the heart (apparently from previous inflammation), and more loosely over the auricles and base of the heart generally, where we found evidences of recently effused lymph. The membrane itself presented a most vivid congestion in patches with spots of apparent ecchymosis. The valves, both mitral and aortic, were found healthy, but the lining membrane of the aorta for a distance of two inches from the valves, was found extensively affected by atheromatous degeneration, roughened and worn away in patches, thus accounting for the basic murmur heard, without any disease of the semilunar valves.

The lungs and kidneys were healthy.

The foregoing case has been thought worthy of record, owing to the rarity of an organic lesion of the brain occurring during the course of acute rheumatism, also the suddeness with which alarming head symptoms developed themselves, and the rapidity with which they ended fatally.

MONTREAL GENERAL HOSPITAL, 1st June, 1868.

A Case of Obstruction of the Bowels overcome by Electro-Magnetism. By F. H. BRATHWAITE, M.D., of Prince Albert, Ontario Co., Ontario.

H. G——, shoemaker by trade, sent for me on the 5th inst. I found him complaining of much pain in the bowels, with bilious vomiting. He is of an eminently bilious habit, and is habitually costive. He suffered at times from bilious colic, and has been ruptured from boyhood,—the hernia has always been irreducible.

I at first endeavoured to allay the irritability of the stomach by chloroform and small doses of submurias with morphia, and by applying mustard sinapisms externally. As soon as the stomach would admit of a cathartic, I gave of submurias grs. x and jalapine grs. v, (at this time I did not suspect any obstruction, as his bowels had moved the previous morning, slightly.) This was retained for over five hours. Emesis again set in; no evacuations followed from the bowels. Wednesday, I gave four pil. catharticæ co., retained seven hours, no evacuation. Thursday morning. I now gave four croton oil pills, one drop in each, one every hour. I waited two hours after they were finished and repeated the ol. tiglii in stronger doses.—No use. I had been continually employing fomentations of turpentine, hot water, vinegar, &c., poultices of bran, bread and mustard. I had been administering copious stimulating injections, with no result. Thursday afternoon-Inflammation of bowels evidently setting in, chills, great pain over bowels, pulse 110-120; full and hard; tongue furred. I requested a consultation. My friend, Dr. Ware, saw the case with me. We agreed that cathartics had been pushed far enough. Sedatives with large alterative doses of calomel were now given every three hours. A mercurial impression was desired. A large fly blister was laid on the bowels; at this time the vomiting, although not so frequent, was decidedly stereoraceous. This treatment, with injection, was kept up until the Monday following. On Friday, 8th, we noticed a tumour (feecal) to the right of the umbilicus, which disappeared in a couple of days, and was evidently pressing against the bladder, as the patient was incessantly making water. I tried to find it per anum, but could not.

Tuesday 13th.—He was sinking fast; appearance cadaverous; pulse 110—120; weak and fluttering; intense thirst; bowels bloated; old rupture becoming much distended and painful, (the hernia had not hitherto caused any inconvenience.) The stercoraceous vomiting was still taking place at longer intervals. Cold clammy sweats would now and then break out; in short, the man was dying. My friends Drs. Ware and Warren were, with myself, in despair. A good, honest man

was passing away before our eyes, and we were powerless for good. We thought of liquid mercury, but it frightened us. We thought of cold dashes of water on the bowels, but that was worse. We had done every thing; cathartics and stimulating injections had failed, sedatives and blisters had subdued the peritonitis, but that was not sufficient to save the man. Alteratives of mercury did not produce any appreciable results. All had failed. I would have bled the man at the outset, but he wanted more rather than less blood. As a dernier resort we applied electricity, a powerful electro-magnetic battery was employed, (one of Kidder's), one pole kept secure at the anus, and the other first moved up and down the spine, then passed slowly over the several parts of the colon. How the bowels twisted and tortured themselves! How they contracted into knots and relaxed again! The full strength of the battery was employed for nearly an hour. And before the galvanic influence could pass away, we poured into him about an ounce of castor oil. The man slept, and awoke to evacuate his bowels. Six or seven fearfully offensive motions followed, and the man is now (May 16) quite convalescent.

I have taken the liberty of recording this case, as an instance of life saved when death seemed inevitable, and as a lesson to my medical brethren never to give up such cases until the man is dead. I look upon this case as one of pure obstruction from focal impaction, (the accumulation perhaps of months), complicated with hernia. I am satisfied that the rupture had nothing to do with bringing about the obstruction; it threatened, however, at last to wind up the case summarily. Galvanism, I am aware, is recommended as a means of overcoming such obstructions, but it has generally failed. Could it have been because a cathartic was not given after the galvanism, or could it have been because the cathartic, if given, was given after the active effects of the battery had passed off?

## REVIEWS AND NOTICES OF BOOKS.

Epidemic Meningitis or Cerebro-Spinal Meningitis. By ALFRED STILLE, M.D., Professor of the Theory and Practice of Medicine in the University of Pennsylvania. Philadelphia: Lindsay & Blakiston. Montreal: Dawson Bros.

This is an exceedingly well written volume of nearly 200 pages upon a disease which, within the last few years, has been attracting considerable attention both on this continent and in Europe. Fortunately, Canada

has, in a measure, been exempt from it; for although, we believe, isolated cases have occurred in various portions of the Province, so far as we are aware, we do not know of its having in any portion assumed an epidemic form. Dr. Stille's opportunities of studying the disease have been very extensive, several hundred cases having come under his observation while attending the Philadelphia Hospital. In giving its history, he confines his attention to the various epidemics which have occurred since the beginning of the present century. He says, "Its outbreaks have occurred almost simultaneously in regions as widely separated as Europe is from America, and annually it has made mid-winter attacks upon towns and rural districts, the salubrious and unhealthy alike, completing the cycle of its progress in a period varying from ten to fifteen years. Three such periods have occurred during the present century. The first of eleven years began in 1805, and terminated in 1816, the second of thirteen years, occurred between 1837 and 1850, and the third extended from 1856 to the present time. These two conditions, of simultaneous appearance in widely remote places, and of annual recurrence for a series of years, characterize no other disease whatever." The symptoms are given with much care, and a careful study of them would tend to prevent the numerous erroneous diagnoses which, we believe, have everywhere been made in connection with this disease. We have not the space to copy them at full, for they are very lengthy, but we give one or two extracts. After detailing the symptoms which usher in the attack, and which are in a great measure similar to those of ordinary meningitis, he says, "These phenemena more or less gradually assume a graver aspect, or usher in a heavy chill, which, in its turn, is followed by alarming symptoms, and especially by excruciating pain in the head, a livid or pale and sunken countenance, and extreme restlessness. The pulse is as often slow as frequent, and the skin but little, if at all, warmer than natural. The vague pains which opened the attack are now concentrated, and seem to dart in every direction from the spine, which is also, especially at its upper part, the seat of severe aching; and, in a large proportion of the cases, its muscles become more or less rigidly contracted, so that the head is drawn backwards, or the whole trunk is arched as in tetanus. In many cases eruptions appear upon the skin. During some epidemics the only one observed is herpes labialis; in others the eruption resembles roseola, measles, or the mulberry rash of typhus, or, from the first, it consists of petechiæ, vibices, or extensive ecchymoses." Headache, Dr. Stille says, is a very constant symptom, and is usually felt in the forehead between the eyes. It varies in intensity in different epidemics, and is often relieved by dry cupping or blisters on the nape of the neck. He

alludes to two symptoms, which he states are thoroughly characteristic of the disease. The first is cutaneous sensibility, due to hyperæsthesia of the skin. The second is pain in the spine and limbs, and is almost uniformly present. The various modes of treatment are discoursed at good length; but we do not gather that any particular method has been more effectual than another. The little volume will well repay perusal.

Obstetric Clinic; a Practical Contribution to the Study of Obstetrics and the Diseases of Women and Children. By George T. Elliot, Jr., A. M., M.D., Professor of Obstetrics &c., in the Bellevue Hospital Medical College. New York: D. Appleton & Co. Montreal: Dawson Bros., 1868.

That Dr. Elliot is a close student, and a man of thoroughly practical ideas, the work from his pen, the title page of which we give above, proves beyond question. For fourteen years he has been connected with the obstetric department of the Bellevue Hospital, and during that time he kept full and accurate notes of every case of any clinical interest which was observed within its walls, and from these he has deduced a few facts and theories having a direct application to obstetric practice. Each fact or theory has a separate chapter devoted to its consideration, to which are appended the most interesting cases in illustration and the clinical remarks which were made on the cases reported. Perhaps the most interesting as well as the most important chapter in the entire volume is the first one, which is on the relations of albumin-urea to pregnancy, a condition so full of danger to the pregnant female. is the custom in Bellevue to examine the urine of all cases admitted to the obstetric wards, and Dr. Elliot gives the results of four hundred and thirty-seven examinations, and in twenty-three albumen was present. In three of these cases, however, it was distinctly proved that the albumen present depended upon the admixture of pus. Deducting these, it gives us a ratio of one in nearly twenty-three cases. In making this calculation it is to be borne in mind that most of the women whose urine was examined were pregnant for the first time, and these especially liable to complications. Dr. Elliot urges early and continued examination of the urine, so as to detect the first trace of albumen. Its presence in this condition involves all the dangers associated with its appearance in other states of the system, but it entails a singular power, especially in some constitutions to that much dreaded complication of the puerpural state, convulsions, and also to mania. In summing up this chapter he hopes that experience and study will ere long enable us greatly to diminish the dangers which are associated with this condition of the kidneys.

Chapter iii. is on chloroform, and venesection in Puerpural Eclampsia, and consists almost entirely of cases, some thirty-three of them being reported. We have read a number of them, and they shew conclusively the almost wonderful controlling power of chloroform over this terrible complication. He says, "if only one method of treatment was given to me for these cases, my choice would unhesitatingly be for chloroform." He alludes to the fondness many New York Physicians have for Sulphuric Ether, but all things taken into consideration, he believes that chloroform is the most prompt and certain means we possess, of arresting and controlling the convulsions. Puerpural Mania occupies a brief chapter; he writes hopefully of the majority of cases, and recommends sending them to an asylum to be the last resort of the physician.

Chapter xvii is an article on "Kyesteine in the urine, as an indication of pregnancy" which was published some nine years ago in the New York Journal of Medicine. The experiments were made by Dr. Elliot and Dr. Van Arsdale. They examined the urine of one hundred and sixty pregnant women, and kept a tabulated statement of over one hundred and fifty-three. After careful examination of this large number of cases they came to the conclusion that they saw nothing conclusive as to recognize peculiarities in the urine of pregnancy." We think that there is nothing positive in its (Kyesteine) indications, and that its appearances can scarcely even be called "corroborative." In his preface, Dr. Elliot says that since he first published this paper, further experience has confirmed him in the opinion expressed.

We have had much pleasure in looking over this work, and are fully convinced it contains a mass of valuable information. We cannot avoid saying, however, that we do not admire Dr. Elliot's style of writing; we think many of his sentences a little ambiguous and difficult to understand. With this exception, which we hope to see improved in future editions, we have been much pleased with it. Messrs Appleton & Co. have printed it upon paper of very superior quality.

## PERISCOPIC DEPARTMENT.

Surgery.

THE TREATMENT OF VENEREAL DISEASE.

By Dr. G. H. B. Macleod.

The treatment of venereal disease divides itself into the local and constitutional. The former is of course alone required in the case of the

soft chancre, but both are necessary in true syphilis. It may, however, be here said that a mere exceriation demands the simplest possible application. Water dressing, or a very weak stimulant, or astringent solution applied on a thin teased-out flake of carded cotton; or what often succeeds better, a little chalk powder, or starch, dusted over the breach of surface, combined with attention to the bowels and the avoidance of wine, will probably suffice. In dressing this, and all such sores, the greatest gentleness should be enjoined. The old dressing should be removed by a stream of lukewarm water, and then the new application put on without any "scrubbing" of the part, and with as little irritation as possible. If the foreskin is returned over the dressing, the thinner the layer of lint or cotton put under it the better, and the patient should be forbidden to examine, as he is apt to do in his anxiety, the part during the intervals between the dressings, as the irritation thus caused is most pernicious. Twice a day is as often as the dressings should be renewed in any case.

"Herpes præputialis," as it may depend upon want of cleanliness, contact with leucorrheal or other irritating discharges, stricture of the urethra, deranged bowels, and especially the acidity arising from excesses at table, or from the dyspepsia which attends gout, will, for its cure, demand the removal of whichever of these causes may be present. Locally the same applications may be used as are employed in excoriation, especially dry absorbent powders. Caustic is most injurious, and should never be applied. Lime water with opium forms a good wash, or some port wine, having water and tannin added, according to the requirements of the sore.

If a chancre is seen early it should be thoroughly and completely destroyed. This rule holds good as regards both sores. We destroy the virus of the non-infecting chancre in order to prevent local complications, to avoid it spreading or becoming phagedenic, to prevent the bubo of absorption, to hinder it from multiplying itself on the patient or being communicated to others. We destroy the hard chancre, not from any hope we can entertain thereby to prevent constitutional infection, because by the time we are able positively to say "this is a hard chancre," the system is already infected, but by adequately appplying caustic we convert the infecting chancre into a simple suppurating sore, we prevent its communication to others, we remove any depot of virus which may remain in the hard base to feed the disease in the system, we give the patient's anxiety a certain relief and inspire him with some confidence, and we also guard ourselves from the imputation of having omitted such application when afterward constitutional symptoms appear. It is probably true

that if the poison of the hard sore is inoculated on a breach of surface that the specific chancre may so quickly follow that we may be able to destroy the virus, while it is yet local, but it is the rare exception that the sore is thus seen by the surgeon. In the great majority of cases when the chancre comes under observation the time has gone past for any effectual action being taken to prevent the entrance of the poison into the economy, and if we have no other aim than to obviate that in applying escharotics to the sore, we would far better omit this painful step altoge-If we use means to destroy the chancre before the hard base, swelling glands, and other evidence of its infecting character, appear, we can have no possible grounds on which to say that we have had a true chancre to deal with at all, or that we have, by our caustic, prevented constitutional empoisonment; but, on the contrary, there are four chances to one that it is a sore which would never have been followed by any such evil results; whereas, if we wait till such evidence is supplied, then all hope of achieving the end in view is gone, as such indications as we can rely upon as demonstrating the nature of the sore are themselves evidence of the constitutional implication. This is the great obstacle to a decisive opinion regarding the effects of preventive treatment of syphilis-Men unconsciously deceive themselves. Caustic is applied, and no constitutional disease appears, then they conclude that it has been prevented by the local application; if, on the contrary, the constitution is invaded, then they think the escharotic was too late in being used, or it was not effectually applied. We are apt to forget how much more common the simple sore is than the infecting, and how many non-venereal lesions are aggravated into formidable and confusing ulcers by the applications which the patient, in his fear and anxiety, so often uses himself before he comes to us. Thus, then, we conclude that all suspicious sores should be effectually destroyed at as early a period as possible.

There are many caustics in use for the destruction of the chancre. Some of these are too deliquescent, others too weak, others too painful and slow in their action. The hot coal, or "dottle" from a tobacco pipe which are occasionally used by the vulgar, are more to be relied on than many of the escharotics employed by surgeons. I have experimentally tried all the caustics which have been recomended, and very much prefer strong nitric acid, or the acid nitrate of mercury to them all. I generally employ the former. It is very manageable, penetrating, and rapid. The sore must be well exposed, wiped dry, and a large drop of the acid put upon its centre by means of a spun-glass brush, or a bit of wood, and then the edges and whole surface rapidly destroyed. The patient should be placed with his back against the

wall, so as to prevent his withdrawing his person when he feels the sharp sting of the acid. Plunging the part into water or pouring a stream over the sore, quickly arrests further destruction, and allays the pain. Such simple means succeed in neutralizing the acid just as well as an alkaline solution. The spray apparatus should not be used to diminish the pain, as it hardens the tissues, and so prevents the caustic penetrating, and it renders the surface of the sore wet, and so neutralizes the acid. Caustic soda and potash; sulphuric, hydrochloric, acetic, and chromic acids; chloride of zinc; Velpeau's paste (sulphuric acid and saffron); alum; sulphate of zinc or copper; the hot iron; Ricord's application of animal charcoal six parts and sulphuric acid two parts, and many other escharotics which have been used, are in my opinion inferior to strong nitric acid and the acid nitrate of mercury, for the reasons before given. It requires no prolonged and painful applications, like chloride of zinc, or Velpeau's and Ricord's paste; it penetrates as no alum, or sulphate of zinc or copper, or chromic or acetic acids can do; it is not so formidable or painful as the actual cautery, and is not too deliquescent like caustic potash. Excision terrifies the patient, and is not effectual, as the records of the Dreadnought sufficiently prove, as not only is it very difficult to excise the whole sore, but the edges of the large wound are very apt to become inoculated, and thus matters are made worse than ever. Of all the local applications the most useless, in my opinion, is nitrate of silver. It is not powerful enough to destroy the sore effectual ly, and so fails in fulfilling its most important requirement; and it causes much irritation (especially if repeatedly used) and inflammation in the sore, gives a pseudo-hardness to the base, excites the lymphatics, and altogether does much mischief. It introduces features into the case which do not legitimately belong to it, and so occasions confusion, while, as has been said, it gives rise to unnecessary complications. No caustic should be applied to a chancre so long as it is inflamed. By the use of water, or some soothing application, or possibly by the aid of a leech and fomentations, or steaming, the excited action should be subdued before the escharotic is employed. One thorough application should suffice. The repeated use of a caustic does infinite harm. If it has once been properly applied, it should not again be required, unless phagedena set in. After the uses of the caustic a poultice, or, what is quite sufficient in most cases, warm water dressing, should be employed to cause the slough to separate, and then we have a simple ulcer to deal with, the applications to which will, like any other non-venereal sore, depend on its requirements at the moment. If it is slow to heal, or fails to heal from excess or defect of action, it will demand soothing or stimulant dressings; but if

it presents, as is usual, the characters of a healing granulation, then the simpler the applications the better. Water alone, or medicated by the addition of a small amount of metallic salt, or an astringent, or a solution of opium, will in very many cases suffice. As in the management of other ulcers, we may have occasion to change the remedies, as a "tolerance" is attained in the effect of any particular application; and it should always be remembered that black-wash is not a fit dressing, unless the ulcer requires a stimulant, and in that case it is not so cleanly as a weak solution of sulphate of zinc. Many would seem, by their unfailing use of black or yellow wash, to imply a belief in some specific effect of a mercurial on a venereal sore. So far from such a remedy being good for all chancres, it is supposed by not a few greatly to predispose the soft sore to phagedenism. Black or yellow wash are only useful when a metallic stimulant is demanded, and then, too, we may use the mercury in the form of vapour, if we please, though it has no special advantages, and is somewhat troublesome. Let not the ulcer be "oppressed" by remedies, but use the simplest dressing which will fulfil its wants. It matters comparatively little what wash is used, so long as it fulfils the requirements of the sore as to stimulation, soothing, etc. If its wants are properly recognized, there are plenty of agents which we can use. No stimulant application is, as a rule, better than Hey's red wash, Ricord's aromatic wine, or a solution of tartrated iron, or a weak solution of the muriated tincture of iron; nor does any astringent answer better than tannin and glycerine; nor is any soothing dressing superior to a watery solution of opium. All ointments are bad, as being apt to become rancid and poison the sore. After the destruction of the virus, the local management of soft and hard chancres is the same in all respects. They are both by the caustic reduced to the condition of simple granulating sores, and are to be treated accordingly. The hard chancre often heals up very quickly.

The bubo which may attend the soft chancre should be treated early, and with the aim of preventing suppuration. If it arise from the absorption of virus from the ulcer, our measures will fail to effect that end, as suppuration is sure to result; but we may by judicious measures diminish the area of inflammation and limit the amount of suppuration. If, on the other hand, the bubo be a simple adenitis, then, by the employment of the antiphlogistic treatment, we may, in most cases, prevent suppuration altogether. Rest is especially necessary, together with fomentations, preceded, it may be, by the application of leeches, and the administration of salines. Low diet should also be enjoined. Bubo is most frequently due to the repeated irritation of the ulcer by caustic or other applications, and our measures for preventing suppuration are not unfre-

quently thwarted by the irritable or scrofulous disposition of the patient. An opiate suppository at night is highly useful, by giving rest and preventing erections, by which the ulcer is irritated and the glandular complication augmented. When it is evident that pus is going to form, we apply poultices, and open the abscess freely parallel to Poupart's ligament. Small incisions are to be reprobated, and "multiple punctures" are worse than useless. A poultice will be employed till the pus is removed, and then the cavity of the abscess managed like a hollow ulcer. If the edges of the wound get inoculated by the pus, then we must apply caustic to them as to the primary sore; and if the skin get thin and undermined and so diseased as to be incapable of recovery, then we must remove or destroy it. If a gland project from the cavity of the abscess and prevent its closure, then we must excise it, or destroy it by caustic. Sinuses must be split up, and dressed so as to granulate from the bottom. The knife should always be preferred to caustic for opening buboes, and with the aid of the spray apparatus, we can accomplish it without pain. It is possible that the use of caustic may render the inoculation of the edges of the opening less likely to occur, but its slowness and painfulness more than counterbalance such advantages.

If the tendency to suppuration is checked, and enlargement and hardness in the gland alone remains, then the counter irritation should be employed. Blisters, or iodine, or a stimulant embrocation, may assist the removal of such deposits, but there is always great risk by their premature or inappropriate use of reviving the inflammation or inducing suppuration.

The hard rolling glands which accompany the infecting chancre demand no local application. They should be simply guarded from all irritation. Malplaquet's plan of using finely powdered bichloride of mercury, and pressure after vesication, is seldom of much use, and is no compensation for the possible harm resulting from the irritation it causes, and the laying up which it necessitates. So, too, all kinds of counter-irritation are apt to be injurious. The hard glands are here part of the constitutional affection, and are only legitimately amenable to the remedies against such constitutional disease, with the other traces of which they will disappear. If from any cause an abscess should form in the groin in connection with the hard chancre, then it must be treated like any other abscess in the same part.

Phagedena may affect either chancre, but it is infinitely more common in the soft than in the hard, and is in it much more destructive. It may prove a most terrible affair in broken-down intemperate persons, and demands most energetic treatment. The patient should be isolated, and

the most perfect cleanliness and ventilation enforced. If mercury was being administered it must be stopped, and that food which is most nourishing and easiest of digestion given, with a liberal allowance of wine, unless the patient be plethoric (which he very rarely is) and there is evidence of acute inflammation round the sore. Phagedena is usually a sign of depression and feebleness, and is to be managed accordingly. If, however, there is acute inflammation present, then it must be subdued in the ordinary way. The sore must be freely cauterized with strong nitric acid, and the application renewed as often as may be required to arrest the disease. When, by means of carrot or linseed meal poultices, combined with disinfectants, the eschar is separated, a strong solution of potassio-tartrate of iron (30 grains to the ounce) forms the best dressing, and a drachm of the same salt should be administered in the 24 hours internally, with a full opiate at night. It is some years now since we have had any bad cases of spreading sore to deal with in the Lock Hos. pital, and this I attribute mainly to the early and free use of the salt of iron just mentioned.

As regards warts and vegetations of a syphilitic origin, they should be removed with scissors, and the part from which they sprung touched with caustic or perchloride of iron. There is not the least fear of excessive hæmorrhage, and the spray apparatus will greatly diminish the pain. Warts can be very effectually destroyed by touching them with strong nitric, chromic, or acetic acid daily, till they are completely killed, and then removing them with a spatula or the nail. In the female, syphilitic vegetations occasionally attain an enormous size, hanging down in dendritic irritable masses, which exude a most nauscous discharge.—Glasgow Medical Journal.

DISLOCATION OF THE SHOULDER OF NINETY-TWO DAYS DURATION,
REDUCED BY MANIPULATION.

By J. M. Boisnot, M.D., of Philadelphia.

On September 10th, 1867, Mr. B., et. 30, came into my office with an injury of his right shoulder. He had fallen upon his hands, and the efforts made to prevent this, added to his natural weight of 180 lbs., served to produce the condition herein described.

It is necessary to state here that the date of this visit was thirteen weeks subsequent to the receipt of the primary injury; he had consulted a physician, obeyed his instructions for the treatment of what he called, "a bad sprain with a fracture of one of the little bones," and had even

attempted to use the arm when some of the pain had subsided in order "to get rid of the stiffness."

My examination of the case showed a difference in the shape of the two shoulders, the injured having lost the roundness, so prominent a feature in the natural condition, presenting instead a slight elevation in front and beneath the outer third of the clavicle; the motions of the arm very few, imperfect, and attended by pain.

I diagnosed this condition as luxation of the humerus forward, and told him my further examination and treatment would be attended to on the following day, when I could place him under the influence of ether.

Sept. 11th, 1867, my friends Dr. Wm. M. Turner, and Dr. Thomas G. Morton, having examined the case, and agreeing with me as to its nature, gave their assistance in the work of reduction.

Ether was used, and upon total relaxation, the body was held firmly, and the arm so rotated by manipulation that the attachments formed were broken up, and the head of the humerus restored to the glenoid cavity; from which it had been absent just 92 days. The subsequent treatment consisted in keeping the elbow well in toward the middle line of the body, and supporting the head of the humerus in its natural position; for these purposes I applied the apparatus which I devised some time ago, for the treatment of fracture of the clavicle.

October 28th, 1867, he was discharged well, and with ability to use the arm freely and without pain; at this writing, March 17th, 1868, he has perfect use of the arm. This case is another plea for careful examination of patients who have received injuries, in order that a correct diagnosis may be made, without which, treatment becomes mere guess work; it shows that difficult and long standing dislocations of the shoulder joint may be reduced by manipulation; and lastly, as a matter of no slight importance, the necessity of proper after-treatment in the matter by rest and support, the appliances for which receiving as much attention in their adjustment, as those employed in cases of fracture.—Philadelphia Medical and Surgical Reporter.

### CLINICAL REMARKS ON THE TREATMENT OF VARICOSE VEINS.

BY STEPHEN SMITH, M.D., Surgeon to Bellevue Hospital.

The treatment of varicose veins is palliative or radical. The palliative treatment is directed to the external support of the veins by means of such appliances as may be adjusted to the part, and will make equal pressure at all points. In the lower limb, a bandage properly applied will answer the purpose temporarily, but it is so easily displaced that it

serves no useful purpose where the patient leads an active life. The elastic stocking is a far better appliance, and is generally resorted to by those who can afford them.

The radical treatment aims at the obliteration of the vein, and hence, a permanent removal of the conditions on which the disease depends. In carrying out this treatment we must necessarily resort to operative measures, and no one of the various operations hitherto adopted has proved to be free from danger. Too frequently inflammation has occurred, and occasionally it has assumed a severe type and terminated fatally. The form of inflammation most dreaded was phlebitis, or inflammation of the vein itself. This disease was thought to be almost certainly induced when the vein was simply wounded, and but few surgeons had the hardihood to penetrate a vein in their operations. But inflammation also frequently occurred when the instruments employed were passed in the neighbourhood of the vein, or when excision of the vein was performed, and occasionally proved disastrous. These results have from time to time brought nearly every operation into more or less disrepute, and rendered surgeons timid about resorting to radical measures.

The obliteration of the vein by caustics has given more general satisfaction than any single method. And yet it is not free from severe if not dangerous consequences. We do not always sufficiently limit its local action, and it may then penetrate deeply and extend widely and do great harm. It is not, therefore, a remedy which can be placed in the hands of every practitioner with perfect safety.

Of the two methods of treatment, namely, the palliative and radical, the latter is infinitely preferable, provided our procedure is safe and effective. Those conditions I think have now been secured. The method to which I refer is the injection of the vein with persulphate of iron. The operation has been performed frequently in this hospital, and with the happiest results.

The attention of the profession of this city was first called to this method of treating varicose veins by Dr. Minor, of Brooklyn, in 1860. He reported five cases, in all of which the injection was successful, and in none were there unfavourable consequences.

It may seem strange that an operation which involves puncture of a vein should be attended with no severe inflammatory symptoms, when the older operation by transfixion was so frequently dangerous, and occasionally fatal. This is explained by the fact that in injections the vessel is itself medicated by the persulphate, which tends powerfully to arrest the inflammatory process.

It must be stated also in regard to the persulphate that it is a non-

irrituat to the internal membrane of the vein. However freely it is employed, the inflammation is still very inconsiderable, rarely amounting to more than a blush of redness, and slight swelling; and at the most, giving but a small subcutannous abscess, or, as in one case, a light erysipelas. You must remember that I speak now of the persulphate of iron. Some have mistaken, and have employed the perchloride, which, though powerfully hæmostatic, is nevertheless an irritant, and creates frequently considerable local inflammation.

The immediate effects which we obtain by injections of the persulphate are the same as those which we seek by other methods, namely, the formation of a clot. This clot is very firm, and at once perfectly occludes the vessel. It is much more firm and effective than those clots which form from external pressure, or other mechanical agencies.

The operation is very simple and can readily be performed by any one. A common subcutaneous syringe is first charged with the liquid persulphate, (Squibb's preparation); the patient takes the erect position so as to distend the veins of the leg; the needle of the syringe is then passed into the cavity of the vein, which is pressed by the finger, and five, ten, or fifteen drops injected. In a few minutes the clot is detected by external examination, and the needle withdrawn. The patient should remain in bed for several days, and cold applications be made to the puncture.

As a precautionary measure I always apply a compress and roller over the trunk of the vein on the cardiac side to prevent the possible escape of a coagulum from the mass into the general circulation. I usually inject the larger trunks, and generally inject at several points at one sitting.

In the treatment of varicose veins, therefore, you should, in my opinion, adopt radical measures. The time has passed when you should be satisfied with merely palliative treatment in a case which demands interference. Palliative measures, as the term indicates, are not curative; they leave the affected part in no better condition than when first employed; they are a constant source of annoyance, and to the poor a burdensome expense, which cannot long be endured.

In the method by injection of the persulphate we have a remedy which answers every indication, and may be regarded as entirely safe and efficient.—Exchange.

## A NOTE ON CHRONIC URTICARIA.

Chronic urticaria is often a very troublesome affection, and a few hints regarding it, based on hospital experience, will be doubtless acceptable to our readers. Dr. Hillier, physician to the Skin Infirmary of this

hospital, considers the disease to be one requiring the utmost discrimination for its treatment. Occasionally a case will be found to depend on one article of diet, which it requires careful inquiries and observation to ascertain. One case was found to be caused by cheese, another by coffee, another by tea. In such cases the mere disuse of the offending article will sometimes cure the disease. When the patient is of a rheumatic tendency, alkaline medicines are of use. In very many cases colchicum is of great service; some of these are probably gouty in their nature. In many of them, however, it is not possible to find any indications of a gouty constitution. Dr. Hillier has seen great benefit from the use of quinine, especially when the attacks occur with marked periodicity. When there is no gastro-intestinal irritation, arsenic has been sometimes found useful. Unfortunately it is not always easy to decide what remedy shall first be tried. One case coming under Dr. Hillier's care from time to time is always cured by a few doses of cod liver oil. Dilute nitric acid has occasionally been found serviceable.

Of twenty-eight cases of which Dr. Hillier has notes, nine were either cured or received much benefit from the use of colchicum and alkalies. In four, quinine was given, of which three were cured, and of one the result was not known. In two cases nitric acid relieved the patients. Of three cases under alkaline treatment alone, two were cured, and in one the result was unknown. Arsenic cured one very obstinate case, and aggravated another case.

In all cases of chronic urticaria it is important to enquire as to the possible existence of bugs, fleas, pediculi corporis, or of the acarus scabiei. It is not uncommon for patients to suffer a long time from urticaria caused by one of these parasites, whilst other signs of their irritation are almost absent. In these cases ointment containing stavesacre or sulphur, with attention to cleanliness of bed and body linen, will cure the disease. Local applications in other cases appear of little permarent use; lotions or ointments containing chloroform, or nitric or acetic acid lotions, give momentary relief.

Pruriginous strophulus, a disease of infants, closely allied to urticaria, is usually relieved by the syrup of the iodide of iron.—Lancet.

## Midwifery and Diseases of Momen and Children.

#### THE OBSTETRIC HAND.

The following excellent suggestions from the pen of Dr. Robert Barnes, we find in the *Medical Times and Gazette*, and we fully indorse its teachings:

"In ordinary labour the obstetric hand is the only instrument required. It is also the only instrument called for in many of the greatest difficul-In mal-presentations, in placenta prævia, in many cases of contracted pelvis, in not a few cases where, after perforation, the crochet and craniotomy forceps have failed to deliver, the bare hand affords a safe and ready extrication. One cannot help seeing that practice is often determined by the accidental perfection of, or familiarity with, particular instruments. Thus, a man who has only reached that stage of obstetric development which is content with a short forceps, will be armed with a good perforator and crochet. He cannot fail to acquire skill and confidence in embyrotomy, and greatly to restrict the application of the forceps. Again, the preference generally given on the continent to cephalotripsy over craniotomy and extraction by the crochet or craniotomy forceps is the result of the great study directed to the perfecting of the cephalotribe. At the present day we may boast of having good and effective instruments of all kinds, each capable of doing excellent work in its own peculiar sphere, and, moreover, endowed with a certain capacity for supplanting its rival instruments. For example, the long forceps to supplant craniotomy in a certain range of cases of minor disproportion. Hence, it follows that it is of more importance to have a good forceps which can save life than it is to have a good perforator and crochet which destroy life. At the same time, it is eminently desirable to possess the most perfect means of bringing a feetus through a very narrow pelvis, in order to exclude or to minimize the necessity of resorting to the Cæsarian section. Our aim should then be to get the most out of all our instruments-to make each one as good of its kind as possible. And admirable is the perseverance, marvellous and fertile the ingenuity, that have been brought to this task. I will not say it has all been misdirected; but certainly the cultivation of the hand, the study of what it can do in the way of displacing cold iron, has been much neglected. It would be not less instructive than curious to carry our minds back when the forceps and other instruments now in use were unknown, and to confront the problem which our predceessors, Ambrose Paré, Guillemeau and others had to solve-namely, how to deliver a woman with deformed pelvis without instruments. That they did successfully accomplish in many instances with the unarmed hand that we do now with the aid of various weapons, there can be no doubt. If this implies greater poverty of resources on their part, it not the less implies also greater manual skill. I am confident that the possession of instruments, especially of the craniotomy instruments, has led within the last century to a neglect of a proper use of the hands, which is much to

be deplored. We are only now recovering some of the lost skill of our ancestors."—St. Louis Med. Reporter.

## Medicine.

ABSTRACT OF A CLINICAL LECTURE ON PYÆMIA AS A RESULT OF ENDOCARDITIS.

By Samuel Wilks, M.D., Physician to Guy's Hospital.

The following is an abstract of a very full report of the case taken by Mr. J. R. Stocker.

Alfred F—, aged 25, was admitted on January 1, 1868, for heart disease. He stated that he had rheumatic fever in 1851; and that the doctor then informed him that his heart was affected, but he had no symptoms referable to it until four months ago. He then became very ill, with shortness of breath, palpitation, etc., followed by some swelling and pains of the joints. On admission, he was seen to be very ill, having sallow countenance, and suffering great distress from shortness of breath and palpitation. The heart was most irregular and rapid in its action, with a loud systolic murmur, heard loudest over the apex. The urine had a good specific gravity, and was slightly albuminous. The legs were somewhat cedematous. He was ordered a saline mixture, with a pill of digitalis, squill, and mercury.

In four days he was much better; the breathing being less oppressed, and heart's action checked. He was then ordered to take ferrum tartaratum.

On January 14, he suddenly felt giddy, and afterward had intense headache.

On the 24th, there was an aggravation of the original symptoms, and great irregularity of the heart's action, with dyspnœa.

On the 31st, he found his right arm and leg very weak and numb. After four days this weakness had increased; and at the same time there was some hesitation in his speech and forgetfulness of words. He had also pain and swelling of the joints.

On February 14, he lay in a most precarious state. There was great irregularity of the heart's action. He had complete right hemiplegia, with partial aphasia; that is, a forgetfulness of many words. Thus, being told the name of a key, he would use the work "key" for every other object presented to him; and being shewn his grapes, and various names for them suggested to him, and among them the correct appella-

tion, he would not assent to any of them. He could read certain words on his bed-card, but not others. He thus continued in a barely living condition until March 1, when he died.

Post-Mortem Examination.—The left middle cerebral artery was plugged, and a large part of the left hemisphere disorganized by an abscess; the pus being green and thick. The lungs were in a state of splenization. The heart showed the mitral valve much diseased, the columns and cords covered with vegetations and shreds of fibrin. The liver contained throughout minute points of pus. The spleen had several fibrinous masses which were softening, and some were purulent—indeed, were distinct abscesses. The kidneys contained fibrinous masses not softening.

I bring this case before your notice, because it is the most marked which I have ever seen of the pyemic process in connection with endocarditis. This disease is one of great interest pathologically, but has scarcely received a full recognition at the bedside of the patient. Although isolated cases of the disease may be found scattered through the journals, it has never been systematically treated of in the text-books of medicine. You know that, by the term pyæmia, we generally understand that form of disease in which the blood is infected by some purulent or kindred fluids; and that certain marked symptoms result, with a tendency to abscess in various parts of the body. The source of the infection is to be found on the surface of the body, and the deleterious matter is taken up into the veins. But now I have to tell you (in a clinical lecture, as I have been doing for many years past in the pathological lectures,) that the arterial blood may be in a like manner primarily infected at the very centre of the circulation. Just as, in ordinary pyæmia, the poisoned blood travels from the circumference to the centre, so here the converse process is in operation, the seat of the infection being the heart itself.

I should tell you that it has long been known that fibrinous masses have been found in the kidneys and spleen of those who have died of cardiac disease, and various theories have been mooted in explanation of their origin; the term capillary phlebitis having been much used of late years, after Rokitansky. We are indebted, however, more especially to the late much to be lamented Dr. Kirkes for unravelling this subject in a most masterly manner. If you refer to his paper, you will find that he had discovered the fact that, if particles of fibrin or vegetations were washed off the valves of the heart, they would be carried into the blood and plug up the vessels; they thus might lead to the destruction of any part, as of the brain or a limb, by the occlusion of the artery proceeding hereto. A case of this kind is now known by the term embolism. It

was also stated by Dr. Kirkes, that the fibrinous masses just spoken of as occurring in the kidneys and spleen, were also owing to small particles of fibrin blocking up the smaller arterial twigs; and he also showed that, with these formations, the blood was necessarily deleteriously affected, and that the patient suffered from symptoms of pyæmia. Now, it has so happened that the first-named facts contained in the doctrine inculcated by Dr. Kirkes have received the attention of the profession; but the latter have been too much disregarded, although equally important. The case of plugging of a large vessel and its effects are so manifest, that the case of blood-poisoning by smaller particles of disintegrating fibrin have been much overlooked except by a few pathologists, who have now and then published isolated cases of the affection. Thus cases by myself and others may be found in the Transactions of the Pathological Society and in the Guy's Hospital Reports. I might say that Dr. Kirkes and myself had, some years ago, some interesting correspondence on the subject.

In an ordinary case of pyæmia, death is most frequently due to a poisoned state of the blood, without any sufficient disease of a vital organ to account for the event; but we have no difficulty in pronouncing upon the character of the disease, from the peculiarity of the symptoms and the existence of a wound on the surface of the body. In the case, how, ever, of pyæmia of the arterial system, arising from infection at the centre of the circulation, no such manifest cause may exist; and, after death, when the fibrinous masses or infractions are found in the viscera, they are believed to be inert, and the valvular disease is considered sufficient to account for all the symptoms and the ultimate issue of the case. Sometimes, however, the cardiac distress is but slight, while the symptoms of blood-infection are most marked, and then we begin to gain an insight into the importance of this variety of embolism. Thus, in a case which I published in the Transactions of the Pathological Society four or five years ago, the man had gangrene of the leg from the impaction of a plug of fibrin in his femoral artery; but, previous to this, he had several attacks of severe illness, accompanied by pains and swelling of the joints. called rheumatic, but which were in reality of a pyemic origin.

In the case of ordinary pyæmia, an abscess may form in the brain, lung, or other organ, and so lead to death; but far commoner is it for these organs to show a lesser disease indicative of the morbid process in operation, while death is due directly to the altered state of the blood. So, in embolism, there are the striking instances of the imbedding of a plug in a vessel, leading to the destruction of the organ which it supplies; but there are also the other cases where the changes in the organ merely point to the blood-infection which is the real cause of the fatal

issue. Why in one case the symptoms are more severe than in another, may be due to the state of softening or disintegration of the fibrin. In one case the deposits are hard; in another they may have softened into a creamy fluid. I had until lately held the opinion that the material into which fibrinous matter softened was not true pus, but only pus-like; for, if examined by the microscope, no cells are seen; and that, if true pus were found either at the source of infection in the heart or in the viscera, endocardial ulceration must have taken place, and the tissues beneath must have been involved. In the present case, however, there was no proof of this deep-seated implication of the tissues; but yet the spleen and brain contained actual and well formed abscesses. I have never before seen so true an example of pyzemia from such a cause.

I wish you principally to remember the fact that the blood may be infected from disintegrating fibrin in the heart; and that all the symptoms of pyemia may result, as violent rigours, followed by sweating, great prostration, sallow skin, pains and swelling of the joints, etc. I do not know that suppuration is necessary to the production of rigours, although it generally implies the introduction of a deleterious substance into the blood. Some of the most striking instances of this were those related in the London Hospital Reports, in which transfusion of fluid into the veins was performed. I have very little doubt that many of the symptoms which we witness in heart-disease are really due to the state of the blood, although overlooked from the greater attention given to the condition of the mechanism of the heart. Thus, in this very case, the patient is said to have had rhematic pains and swelling of the joints, but these were probably pyæmic; and, carrying my memory back to other cases where death occurred after rheumatic endocarditis, I believe now that death was due to blood-poisoning, although at the time we thought the derangement of the affected valve sufficient cause for the event. In other diseases, too, it may give us a clue to the occurrence of certain symptoms; as, for instance, in scarlatina. Here there is the well-known rheumatic affection constantly occurring as a sequel to the disease, and at the same time endocarditis. Also, on post mortem examination, as I have elsewhere shewn, these fibrinous masses already mentioned may be found.

The purport of these remarks is that, in endocarditis or valvular disease of the heart, attended by the presence of vegetations of fibrinous coagula, a blood-poisoning may occur, giving rise to all the symptoms of pyæmia; and also that these may exist to a lesser degree in the form merely of pyrexia, prostration, pain in the joints. The facts are pathologically known, but are not sufficiently recognized from a clinical point of view, owing to the attention being too exclusively confined to the mere deranged mechanism of the heart.

I would also say that these symptoms by no means imply a fatal result. They come and go; the proof of this being found eventually in the cicatrices and remnants of deposits met with in the organs of the bodies of those who have died with heart-disease,—British Medical Journal.

#### PREVENTION OF EPILEPTIC ATTACKS.

M. Broca has presented to the Academy of Medicine an ingenious little apparatus, which has been invented by M. Rozier, of Bordeaux, with the object of exercising an instantaneous compression of the arm, and of thus preventing attacks of epilepsy whenever these are preceded by the aura epileptica. The apparatus had been contrived for an epileptic patient, a quarryman, who was never six weeks without being subject to a fit, and who was warned each time by a peculiar sensation which he felt in the right index. Scarcely a few seconds elapsed between the occurrence of this sensation and the explosion of the attack. It was consequently needful that the compression should be instantaneous. For eleven months the quarryman has constantly worn this little apparatus, and has never once had a complete attack. It is a sort of brasselet, and seems admirably adapted for all the purposes aimed at by the inventor.—Lancet.

#### MEDICAL NEWS.

The proposed alterations at the Royal Infirmary, Edinburgh, it is estimated, will cost £100,000. Mr. Kelley exhibited recently at a meeting of the London Pathological Society, a specimen consisting of two kidneys, both of which were found on the right side, none being on the left.

The distinguished Russian surgeon, Pirogoff, well known for his in-

genious operation at the ankle, died recently.

Dr. Robley Dungleson, for many years Professor of Physiology in the Jefferson Medical College, Philadelphia, has resigned his appointment. Dr. James R. Wood has resigned his Professorship of Operative Surgery and Surgical Pathology in the Bellevue Hospital Medical College. The first medical college established in the United States, was the Medical Department of the University of Pennsylvania.

Nine students from the Dominion of Canada graduated at Bellevue College, New York, in March. The majority are from the Maratime Provinces. A Medical College has been established at Detroit, to be called the "Detroit Medical College." The citizens subscribed liberally towards its foundation fund.—Five nurses from the Nightingale—one of the institutions for training females as nurses—recently left London for Sydney, Australia, to accept situations as head nurses to the hospital in that town.—The Queen has subscribed £250 stg. towards the rebuilding of the Royal Infirmary, Edinburgh.—Sir James Clark has had a severe attack of Bronchitis, from which he is slowing recovering.

# Canada Medical Journal.

MONTREAL, JUNE, 1868.

### MEDICAL PRACTITIONER'S (COLONIAL) BILL.

The Medical Practitioners (Colonial) Bill introduced into the House of Lords, has attracted considerable discussion in the medical periodicals of Great Britian. The Medical Times and Gazette of April 25th, in an editorial article headed "Topics of the day," stated, "That this bill is nothing less than an attack on the rights and privileges of registered medical practitioners of the British Empire, which were secured to them by the Act of 1858. That persons whose names are upon the Imperial Register and who wish to practice in New Zealand, Canada or Australia, may be made to undergo the annoyance of fresh examinations as well as be mulcted in fresh fees." As regards our own colony, or rather that portion of the Dominion of Canada heretofore constituting Lower Canada, certain Legislative enactments have existed since the reign of George III., bearing on the practice of the profession of medicine and surgery in this Province.

In the year 1847 the Canadian Legislature granted an act of incorporation to the medical practitioners of the Province constituting them the College of Physicians and Surgeons of Canada East. By the provisions of that act no persons can practice the Profession of Medicine or Surgery in the Province without first obtaining the License of the College. The wording of the act bearing on all graduates of British Universities or Colleges is as follows: "But any person who has obtained a degree or diploma in any University or College in Her Majesty's Dominions shall be entitled to such license without examination as to his qualifications." As the law now stands, persons practising Medicine, Surgery or Midwifery in Canada East, and who do not hold the license of the College, are unable to enter a court of law and prosecute a patient for non-settlement of a professional claim; furthermore they are liable to summary conviction and fine before a magistrate for continuing to exercise their profession.

without having procured the necessary license. It appears to us that the question involved is whether we Canadians have the power to enact our own laws regulating these matters. If we have, and it is hardly to be believed that our right to enact and enforce our laws will be questioned, then is it impossible for any Imperial Act to become operative in our Dominion, so as to clash in any way with the enactments of our Legislature.

We have certainly extended to our brethren in the British Isles the right hand of fellowship by admitting graduates or licentiates from their Universities or Colleges who come amongst us, to the same privileges which we enjoy, the only requisite being that they shall appear in person. make oath that they are the parties mentioned in the Diploma which is submitted, that they obtained the same after a regular course of study, and having paid the registration fee the License of the College is granted.

It is time we should thoroughly understand our position, as it is unreasonable to expect us, although colonists, to make a one sided or blind bargain. We have Colleges and schools in Canada, in which the curriculum of study is quite equal to the best in the United Kingdom. and yet the right of registration in the Imperial register is not granted to our graduates or licentiates; or in other words, our Universities and Colleges are simply ignored as educational institutions. Our Colleges and Universities, many of them, possess Royal charters, they hold the same letters patent as those held by the time honoured institutions of the mother country, their prescribed curriculum is the same as that exacted by the Colleges at home, and in the matter of preliminary studies we have taken an exact copy of that prescribed by the General Medical Council of Education and Registration of Great Britain, and although we have done everything required of us, and of the educational institutions in the United Kingdom, still the privileges which they possess are withheld from us. Why is this? Surely not because we turn out less competent men, nor is it because of the fear of our flooding the avenues of practice with our graduates; in Canada, numerically, our graduates count by twenties, while the home Colleges turn out their thousands; what good and sufficient reason, then, can be advanced for refusing steadily and persistently to recognize those colonial educational institutions that have conformed in every particular to the wise and salutary enactments of the General Council of Medical Education and Registration of Great Britain? We have heard that it is because of the lack of supervision, the absence of any direct means of inspecting our method of conducting our examinations and of being satisfied that these examinations are fairly and honestly made. This is a matter which could be readily and satisfactorily attended to, without the necessity or expense of sending a special commissioner to inspect our schools.

There are men to be met with in any of the colonies, men unconnected with any of the schools, whose report would be perfectly reliable if that were needed, but we hold that the proficiency of the graduates of any given University or College should be sufficient to stamp the character of the instruction they received, but if more is needed, if an inspecting officer or several such be deemed necessary, they are to be had without the cumbrous and expensive method of sending out persons from the mother country to inspect and report on the character of our educational course. These observations are suggested because we regard the action of the home authorities as narrow-minded and unjust, and although alive to the necessity of caution in granting equal privileges to Colleges separated by thousands of miles, yet all things being equal, we think it would conduce to the credit of the authorities for liberality, and a desire to give to us, as Englishmen, equal rights and equal representation, if we are recognized on equal terms with those educational institutions which alone possess the superior advantage of having existed a half century or so longer.

## THE AMERICAN MEDICAL ASSOCIATION AND THE CANADIAN MEDICAL ASSOCIATION.

The American Medical Association held its annual Session, May 5th, at Washington, D.C., which seems to have been one of great interest and harmony. We are pleased to see that delegates were appointed to represent that Association at the next meeting of the Canadian Medical Association, to take place in September. The gentlemen selected are C. C. Cox, M.D., LL.D., of Maryland; Drs. John L. Atlee, of Pennsylvania; N. S. Davis, of Illinois; Charles C. Dee, of New York; Grafton Tyler, of the District of Columbia; W. M. Wood, of the Navy, and S. D. Gross, of Philadelphia.

We are informed by Dr. Caniff, Secretary for Ontario of the Canadian Medical Association, that he received a letter from Dr. Atkinson, the Permanent Secretary of the American Association, inviting delegates from the Canadian association to be present at the late meeting. Dr. Canniff conferred with the General Secretary, Dr. Belleau, and they decided that in the present partially organised state of the Association, and in the absence from the country of the President, Dr. Tupper; C.B., the kind invitation proffered by Dr. Atkinson could not be responded to. Dr. Canniff communicated to that effect, and at the same time on behalf of the Canadian Association expressed a hope that the

American Association would feel it desirable to send delegates to Montreal in September. This invitation, as we have seen, has been gracefully responded to.

We hasten to assure the distinguished gentlemen who form the delegation, that the most fraternal greeting awaits them from the Canadian Medical Association. Nor shall the city of Montreal be found wanting in the most kindly courtesies.

## CONVOCATION OF VICTORIA UNIVERSITY, COBOURGH, ONTARIO.

The annual Convocation at Cobourgh, last week, was the most imposing and successful that has been held. The Baccalaureate sermon on Sunday evening, the sacred concert on Monday evening, the Alumni Meeting on Tuesday afternoon, the Alumni Dinner on Tuesday evening, the Convocation on Wednesday afternoon, and the conversazione on Wednesday evening, were all occasions of peculiar interest.

#### THE ALUMNI ASSOCIATION.

On Tuesday afternoon a general meeting of the Alumni Association took place. B. M. Britton, Esq., M.A., of Kingston, occupied the Chair. The following officers were elected for the next year:—

Rev. A. Carman, President of the Albert College, Belleville, *President*, W. Beatty, Esq., M. P. P., of Welland, 1st Vice President, Wm. Canniff, Esq. M.D., M. R. C. S. of Belleville, 2nd Vice President, H. Hough, M.A., Secretary, Rev. Professor Burwash, M.A., Treasurer.

Graduates residing in Cobourgh compose the Managing Committee.

After choosing the officers, the attention of the meeting was called to the general interests of the University, and especially to the position resulting from the threatened withdrawal of the government grants to the colleges. The Alumni present were of one mind on this question. Decided and strong resolutions were passed, pledging the Association, whose members reside in every part of the province, to sustain the college, and claiming its right to continued legislative aid. The graduates and former students of Victoria College are thoroughly in earnest on the subject, they simply insist on the right thing being done; and we doubt not that they with the other friends of denominational colleges, will, if it should become necessary, make it manifest at the next elections that secularism must not enjoy a monopoly of public aid.

On Tuesday evening the Annual dinner of the Association was given, at which the Chair was occupied by the President, the Rev. A. Carman,

M.A. Animated speeches were made by the Rev. W. M. Punshon, M.A., Rev. Dr. Ryerson, Rev. Dr. Nelles, Rev. A. Carman, M.A., W. Beatty, Esq., M.P.P., Dr. Boulter, M.P.P., Professor Wilson, William Kerr, Esq., M.A., B. M. Britton, Esq., M.A., W. W. Dean, Esq., M.A., W. H. Kerr Esq., of Montreal, Ashton Fletcher, Esq., M.A., Dr. Peltier, Dr. Canniff, Dr. Lavel, Dr. Potts, H. Hough, Esq., M.A. G. Young, Esq., M.A., J. Mills, B.A., Dr. Diamond, Dr. Fielding, and Dr. O'Rielly. It was exceedingly encouraging to observe the earnest devotion to the interests of the University, manifested by all present.

#### THE CONVOCATION.

The Annual Convocation is every year regarded with increasing interest. To the students the conferring of degrees is much more than a mere ceremony, to the graduates and their friends it is one of unmingled plea sure; the friends of our denominational college, see, in the annually increasing number of graduates, the importance of the work it is doing in the country; while the crowd of visitors and distinguished strangers from a distance, and the eloquent addresses delivered, heighten the prestige from year to year, of this important occasion. The Convocation last Wednesday was the best and the most encouraging that has ever been held. The proceedings were opened by an impressive prayer by the Rev. James Elliot, President of the Conference. Then followed the Latin Oration, by Mr. Edward Charlton, of Ilderton; the Greek Oration, by Mr. James Mills, of Penville; and the Valedictory Address, a very excellent oration on "Cowper," by Mr. James Roy, of Cobourg. Mr. Roy's oration was exquisitely tender and beautiful, and his elocution was very superior.

The degrees were conferred by the Rev. S. S. Nelles, D. D., President of the University. The following degrees were conferred:

B. A.—James Mills, Gold Medallist.—Jonathan B. Dixon, Thos. E-Morden, Edward Charlton, Silver Medallist. James Roy, W. H. Rowson, James E. Blair, John Scott, Henry Bleecker, Henry H. Shaler, Wm. Wilkinson.

M. A.—Ashton Fletcher, B.A., LL.D., J. R. Youmans, B.A., Osborne Lambly, B.A., Alfred McClatchie, B., A., W. F. Morrison, B.A., Andrew Milne, B.A., W. C. Washington, B.A., Byron M. Britton, B.A., W. H. McClive, B.A., LL.B., Cyrus A. Neville, B.A., W. C. Henderson, B.A., David Kennedy, B.A., Wm. R. Parker, B.A., E. B. Ryckman, B.A., Jacob E. Howell, B.A., J. C. Wilmott, B.A.

L. L. B.—J. J. McClaren, M.A., B.C.L., (adendem;) J. B. Doutre. M. D.—Thos. Adams, B.A., R. Garneau, R. P. Aikman, J. Sylvestre, T. Brunskill, A. Marotte, C.H. Brereton, J. Gingras, J. S. Diamond,

J. Drainville, J. Fielding, A. Laferiere, P. D. Goldsmith, S. A. Longtin, W. A Hughson, J. Robitaille, F. King, J. Archambault, R. C. Lloyd, C. S. Stokes, C. Luiz, C. Williams, G. D. Loughead, B. Walden, A. MacLay, P. Valois, L. McAllister, L. Brodeur, A. N. McBrien, H. Choquette, D. Newkirk, E. Valcourt, J. B. Olver, J. Demers, M. O'Reilly, A. Beliveau, F. H. Pope, N. Richard, F. S. Sproule, S. McHenry, B. Vigneau, D. Martel.

D. D.—Rev. J. H. James, Govornor, Sheffield College, England. Professor Geikie then addressed the Graduates in Medicine, with wise

and impressive counsels.

The Prince of Wales Gold Medal was presented to Mr. James Mills, by the Rev. W. M. Punshon, M. A; the Prince of Wales Silver Medal was presented to Mr. Edward Charlton, by the Rev. L. Taylor, D. D.; the Ryerson Prize to Mr. A. G. Knight, by the Rev. Dr. Ormiston; the Webster Prize, to Mr. W. H. Rowson, presented by Dr. Browse; the Hodgins Prize, to Mr. James Roy, by Wm. Kerr, Esq., M.A.; the Cooly Prize, to Mr. J. W. Sparling, presented by Rev. Dr. Jeffers.

Literary Association Prize, for best English Essay, to Mr. James Roy, presented by W. W. Dean, Esq., M. A.; do. do. for Elocution, to Mr. John Scott, by Rev. A. B. Carman, Esq., M. A.; do. do. for English essay, to Mr. D. Robson, by Dr. Canniff; do. do. for Elocution, to Mr. James Allen, by W. Beatty, Esq, M.P.P. The Punshon Prize for Elocution and Composition, was founded at this Convocation by W. Kerr, Esq, M.A.; it was presented to Mr. James Roy, by Rev. Dr. Ryerson.

Each of these presentations was accompanied by suitable remarks, addressed to the successful competitor, and the variety of speakers and subjects sustained the interest of the meeting throughout. Rev. Dr. Ormiston was in one of his happiest moods. He was proud of being the first living graduate of Victoria College, and he cordially and earnestly bore testimony to the noble service the College had rendered to the cause of education. No description can do justice to the address of Mr. Punshon. Brilliant, strong, conclusive, practical, wise, he contributed greatly to the success and influence of this most important Convocation—important at this critical time,—and effectually rallying the friends of "OLD VIC." to the support of our educational standard. His remarks on the relations between Revelation and Science put the subject in its true light, and with remarkable vividness and force—Great as is his eloquence, the simplehearted earnestness of his soul is, to us, the chief charm of his magical speaking.

PROCEEDINGS OF THE ANNUAL SESSION OF "THE MEDICAL ALUMNI ASSOCIATION OF VICTORIA UNIVERSITY," HELD AT COBOURG, ON TUESDAY AND WEDNESDAY, THE FIFTH AND SIXTH DAYS OF MAY, 1868.

First day's session commenced at 11 o'clock, A.M., John Hubert Sangster, M.A., M.D., President, not being present.

H. Peltier, M.D., Edin., Montreal, 1st Vice President, was called to the chair.

By direction from the chair the names of the Alumui present were recorded as follows, viz.

S. S. Corbett, Perrytown; Benjamin Walden, Elginfield; Charles Williams, Glenwilliams; Thos Burnskill, Bondhead; John S. Diamond, Toronto; Laughlin McAllister, Duntroon; Chas. A. Breaston, Bradford; Thomas Adams, B.A., Tweed; R. P. Aikman, Ancaster; J. Fielding, Orono; Ralph E. Lloyd, Stouffville; Wm. A. Hughsan, Delaware; George D. Loughead, Ballymote; Daniel Newkirk, Walsingham; Calvin Luter, Galt; Chas. S. Stokes, Toronto; Alfred N. McBrien, Newtonville; Miles O'Riely, Hamilton; Perry D. Goldsmith, Dundonald; Thos. S. Sproul, Maxwell; Archibald MacLay, Fingall; Frank King, Port Robinson; Samuel McHenny, Sandhill; Jobes B. Oliver, Ragles; Francis H. Pope, Bothwell; E. W. Tegart, Scotland, Co. Brant; Jas. D. Stewart, Ottawa; William Canniff, Belleville; J. Stuart Scott, Cobourg; George J. Potts, Belleville; George Burnham, Ashburnham; William A. Willoughy, Grafton; Marshall M. P. Dean, Reene; S. L. Nash, Ameliasburgh; William Wade, Cobourg; Joseph A. Fife, Hastings; A. M. Rosebrugh, Toronto; George Alra Carson, Whitby; Robert A. Corbett, Perrytown; Walter Bayne Geike, Aurora; C. A. McRae, Erin Village, Wellington; George Abbott Norris, Omomee, James Stimson, St. George, Co. Brant; B. Vigneau, St. Gregorie de Nicolet; R. Garneau, St. Ann de la Perault; J. Sylvester, St Guilleaume D'Upton; A. Marrotte, Montreal; J. Gingras, St. Hyacinth; J, Drainville, Berthier; A. Laferrière, St. Cuthbert; S. A. Langtin, Montreal, J. Robitaile, Quebec; J. Archambault, Terrebonne; P. Valois, Montreal; L. Brodeur, Varennes; H. Choquette, Varennes; E. Valcourt, St. Simon; J. Demers, St. Bruneau; Remi Beliveau, Montreal; Nap. Richard, Montreal; A. N. Pelletier, Antrim; W. Sergius Bald, Antrim. Among the visitors present were Dr. G. H. Boulter, M.P.P., North Hastings; Rev. A. Carman, M.A., President Albert College, Belleville; Rev E. B. Ryckham, Kingston; W. W. Dean, Esq., A.B., Barrister, &c., Belleville.

Minutes of former Session held at Yorkville, near Toronto, 1st and 2nd days of October, 1867, were read and approved.

Draft of Constitution was read and submitted.

Moved by Dr. Rosebrugh, seconded by Dr. Canniff,—That the draft of the constitution, By-laws and rules of order now submitted for adoption, by Dr. Potts, chairman of that committee, be adopted, provisionally only. Carried.

#### REPORT OF COMMITTEE ON ETHICS, SUBMITTED.

Moved by Dr. J. S. Scott, seconded by E. W. Tegart, M.D.—That the consideration of the report of the committee upon "Medical Ethics" be deferred until the annual meeting at Toronto in October next; but that the adoption of a Code especially adapted to the requirement of this Association be recommended, and that Drs. Peltier and Rosebrugh be added to the committee. Carried.

Moved by Dr. Rosebrugh, seconded by Dr. Scott—That the election of officers be deferred until the current meeting in Yorkville in October next. Carried.

Moved by Dr. Nash, seconded by Dr. Tegart, that we adjourn to meet at 6 o'clock P. M. Carried.

AFTERNOON SESSION, 6 o'clock P.M.

Hector Peltier, M.D., Edin., Vice President, and thirty-one members present.

Minutes of morning Session read and approved.

Moved by J. S. Scott, M.D., seconded by Dr. Canniff—That the reading of papers be postponed until to-morrow morning at nine o'clock A.M. Carried.

Moved by Dr. Diamond, seconded by Dr. McAlister—That Dr. James Fielding, from the Yorkville Medical Branch, be requested to respond to the annual toast, "The Graduates in Medicine for the Session of 1867-68, at the Alumni Dinner." Carried.

Moved by Dr. Rosebrugh, seconded by Dr. Remi Beliveau—That Dr. Joseph Archambault, from the Montreal Branch Medical Department, be requested to respond to the toast, "The Graduates in Medicine for the Session of 1867-68." Carried.

Moved by Dr. Scott, seconded by Dr. Rosebrugh-1st. That this association has learned with pleasure of the engagement of Dr. Canniff as one of the Editors of the Canada Medical Journal and most heartily congralate the Publishers in securing so efficient an aid to the Editorial Staff of that Journal.

2nd .- That the Secretary be requested to furnish the proceedings of

this association to Dr. Canniff for publication in the Canada Medical Journal. Carried.

Moved by Dr. Willoughby, seconded by Dr. Burnham—That a list be now opened for subscribers to the Canada Medical Journal. Carried-

Moved by Dr. Rosebrugh, seconded by Dr. Willoughby—That we do now adjourn to meet here at 9 o'clock A.M., to-morrow morning. Carried.

#### SECOND DAY.

The adjourned Session of the Medical Alumni Association Victoria University met at the hour of nine o'clock A.M., Dr. Wm. Wade, Cobourg, fourth Vice President, in the chair. The Association having resolved to take into consideration charges which had been made against certain members of the association, of irregular and unprofessional practices, it was moved by Dr. Potts, seconded by Dr. Willoughby, that all persons present who are not members in good standing in the Medical Profession be requested to withdraw. Carried.

Vice-President Wade desiring to retire from the chair to take part in

the debate, Dr. Canniff was requested to take the chair.

The first charge had reference to advertising by posting bills to announce that a certain Doctor would be in a certain place at such a time. It was shown that it had been done without the accused gentleman's knowledge and contrary to his wishes.

The second charge referred to the conduct of one who had associated himself with an "Eelectic." This case occupied two hours and was fully discussed by nearly every member present. The difficulty was finally met by the following resolution.

Moved by Dr. S. L. Nash, seconded by Dr. Tegart—That the Association does not approve of the principle of associating professionally with the so called Eclectics and Homeopaths, but are willing to abide by the decision of the Canadian Medical Association, which meets in September next in the city of Montreal. Carried.

The third case was in reference to a "Victoria Wine Bitters" advertised and exclusively vended by one who also professed to be an Eclectic. The individual in defence declared the article was sold not as a medicinal remedy, but simply as a Bitters, having for its object the reformation of drunkards, but he admitted when asked, that the Wine Bitters contained one-thirteenth of the whole quantity of pure alcohol.

Moved by Dr. Scott, seconded by Dr. Nash—That this Association disapprove of the course pursued by Dr.—in advertising his Wine Bitters, as calculated to bring reproach on the Profession of Medicine. Carried.

The fifth case was one in which an Alumnus was charged with resorting to the practice of "Cancer Curers" and adopting the usual course pursued by these quacks in the treatment of this disease. This case also elicited considerable discussion, during which Dr. Peltier entered the room. Dr. Canniff at once vacated the chair, and conducted the Vice President, Dr. Peltier, to the chair.

Moved by Dr. Miles O'Riely, seconded by Dr. Tegart—That in the opinion of this Association, the advertisement published by Dr—— as a cancer curer is detrimental to the dignity of the Profession and of this Association, and that he be requested to discontinue the same. Carried.

Dr. Peltier, Vice President, accordingly requested Dr.—to discontinue the practice and plan of his advertisement.

Moved by Dr. Rosebrugh, seconded by Dr. Potts—That whereas some of the members of this Association have published cards in the "public prints" of an irregular character, and whereas this association has not as yet adopted a Code of Medical Ethics, we cannot allow this occasion to pass without expressing our disapproval of the same.

Moved in amendment by Dr. W. B. Geike, seconded by Dr. M. P. Dean—That this Association views advertisements calling attention to special modes of treating special diseases, as cancers, chest affections, ruptures, &c., as at variance with the universally acknowledged rules of Medical Ethics, and hereby expresses its entire disapproval of the publication of such advertisements by any of its members. Amendment carried. The convocation exercises commencing at three o'clock P.M., it was moved by Dr. Scott, seconded by Dr. Diamond—That we do now adjourn to meet at six o'clock P.M. Carried.

The afternoon Session commenced at six o'clock P.M., Dr. Wm. Wade, fourth Vice President, in the chair.

Moved by Dr. Potts, seconded by Dr. Diamond—That in consequence of the prolonged Session of this morning, and attendance on the convocation exercises engaging the time of Dr. Potts, secretary, the minutes of this morning's Session, not being in readiness, are not required to be read, and that this afternoon's Session be considered a continuation of the morning Session. Carried unanimously.

Moved by Dr. Rosebrugh, seconded by Dr. Canniff.—That Dr. Potts of Belleville, Dr. Brouse of Prescott, Dr. Edmonston of Brockville, and Dr. R. A. Corbett of Perrytown, be appointed delegates of this association to attend the next meeting of the Canadian Medical Association to be held in the city of Montreal, in September next. Carried unanimously.

Moved by Dr. Caniff, seconded by Dr. Corbett, and resolved—That the thanks of this association be presented to the county council of the

united counties of Northumberland and Durham, for the favour accorded in placing their council chamber at the disposal of the Medical Alumni Association of Victoria University, and that the secretary furnish that body with a copy of this resolution. Carried unanimously.

Moved by Dr. Rosebrugh, seconded by Dr. Corbett—That the thanks of this Association are due and are hereby tendered to Dr. Potts, secretary, and the committee of management, for the zeal and efficiency with which they have discharged their duties in preparing the business of

this meeting. Carried unanimously.

Moved by Dr. Potts, seconded by Dr. Dean—That the thanks of this Association is hereby tendered to the Grand Trunk, Great Western and Northern Railroad authorities for their liberality in furnishing return tickets at one fare, to members attending the Session of the Medical Alumni Association of Victoria University, and that the Secretary forward a copy of this resolution to each. Carried unanimously.

Moved by Dr. Dean, seconded by Dr. Burnham—That when the report of this Session of the Medical Alumni Association Victoria University, appears in the Canada Medical Journal, three hundred and fifty copies be procured and distributed among the Medical Alumni of Victoria University. Carried.

Moved by Dr. Corbett, seconded by Dr. Tegart—That the reading of the papers prepared by the members of this Association named in circular, and which should have been read during this morning Session, be deferred till the meeting of this Association in Yorkville on the 1st October next-Carried.

Moved by Dr. Diamond, seconded by Dr. Fielding—That the name of Dr. J. S. Scott, Toronto, be added to the delegates appointed to meet the Canadian Medical Association in September next in the city of Montreal.

Moved by D. Willoughby, seconded by Dr. Diamond.—That all members of this Association discountenance and discourage all reprints of an immoral tendency which sometimes appear in the public prints with regard to medical examinations, at Coroner's Inquests, &c., &c., as these have a tendency to lower the standard of morality among classes reading these journals in which they are published. Carried.

Moved by Dr. Scott, seconded by Dr. S. L. Nash.—That the truss presented by Mr. G. V. M. Relyea of Belleville, be referred to a committee, to consist of Drs. Diamond, Geike and Potts, to report at the next Session of this Association. Carried.

Moved by Dr. Potts, seconded by Dr. Corbett.—That we do now adjourn and stand adjourned until the next Session of the Medical

Alumni Association Victoria University, to be held in Yorkville on the 1st day of October next, of which all members shall receive due notice. Carried.

The Chairman congratulated the Association on the fraternal spirit and harmonious zeal for the general welfare of the profession, evidenced by the cordial and wholesome character of the friendly discussions held during the two days the Association had been in Session, and earnestly recommended that, in the future, continued effort for the advancement of our Profession and the uprightness of our conduct in our several fields of practice, might mark us as members of the Medical Alumni Association of Victoria University, thereby adorning the ranks of the honorable profession of which we are members, and honoring the Univerversity with which we are so intimately connected, and bidding all a hearty farewell, announced that the Session of the Medical Alumni Association of Victoria University is adjourned, to stand adjourned until the next regular meeting, to be held in Yorkville on the 1st day of October next, of which all members shall receive due notice.

GEORGE J. POTTS, M.D., Secretary

Medical Alumni Association, Victoria University,.

Belleville, 15th May, 1868.

## MEDICAL ASSOCIATION OF THE COUNTY OF HASTINGS, ONTARIO.

A meeting of the members of the Medical profession of the County of Hastings was held in the town of Belleville on Wednesday the 20th May. There were present, Drs. Lister, Holden, Bradley, Burdett, Hope, Potts, Wilson, Day, Oronhyatekha, Powers, Howell, Boulter, M.P.P., Stewart, and Canniff. Upon motion it was Resolved:—

"That we organise into an association to be called the Medical Association of the County of Histings, to consist of the regular practitioners who are registered under the New Medical Act, residents in the said County."

Committees were then appointed to arrange the question of Medical Tariff, and to prepare a Constitution and By-Laws. The meeting now adjourned to give time for these Committees to prepare their respective reports.

The following Constitution was subsequently adopted.

CONSTITUTION.

#### NAME.

Article I.—That this Association shall be called the Medical Association of the County of Hastings.

Article II.—That the Members shall consist of the Regular Practitioners of the County of Hastings, who are registered under the New Medical Act, by paying the sum of One Dollar.

#### OBJECT.

Article III.—The object of this Association shall be to advance Medical Science and the interests of the Profession.

Article IV.—Each Member shall sign a declaration that he will observe the Constitution, By-Laws and Rules of Order of the Association, and be governed in his professional career by the Code of Medical Ethics adopted by the Association.

#### OFFICERS.

Article V.—The Officers of this Association shall consist of a President, First and Second Vice-Presidents, and Secretary-Treasurer.

Article VI.—The Officers shall be elected annually by Ballot.

Article VII.—The Majority of the votes cast shall determine the election of a candidate for office.

Article VIII.—Any Member who shall violate the Constitution or any of the By-Laws or Rules of Order, or who shall have been guilty of any gross violation of *Medical Ethics*, shall be censured or expelled by a two-third vote of the Members present, but no motion to expel a Member shall be acted upon unless he shall have been duly notified in writing.

Article IX.—That the Constitution and By-Laws may be altered by a two-third vote at the annual meeting, and the President may direct the Secretary to call a special meeting when required.

#### BY-LAWS.

Article I.—The Annual Meeting of this Association shall be held on the Third Wednesday in May, at Belleville, commencing at 10 o'clock A.M.

Article II.—To meet the expenses of the Association, a Tax on each Member shall be levied from time to time for that purpose.

#### RULES OF ORDER.

Article I.—During the Session of the Association the ordinary Parliamentary Rules of Order shall be observed in respect to debates.

The Association then proceeded to the elections of Officers, which resulted as follows: President, Dr. William Hope, Belleville; 1st Vice-President, Dr. G. H. Boulter, Stirling; 2nd Vice-President, Dr. James Lister, Belleville; Secretary-Treasurer, Dr. George J. Potts, Belleville.

The Association then adopted a Tariff to be observed by its Members. The Association then adjourned, having passed a resolution that a Report of the proceedings be furnished the Canada Medical Journal for publication.

#### TO OUR SUBSCRIBERS.

With this number, the fourth volume of the Canada Medical Journal is brought to a close. Those of our subscribers who are in arrear will receive their accounts with this issue, and we would earnestly request a speedy remittance. There are many subscribers in arrear, some indeed, who have never contributed one shilling towards our support. This is not right, and in mercy to themselves the publishers have determined to remove their names from the list of subscribers.

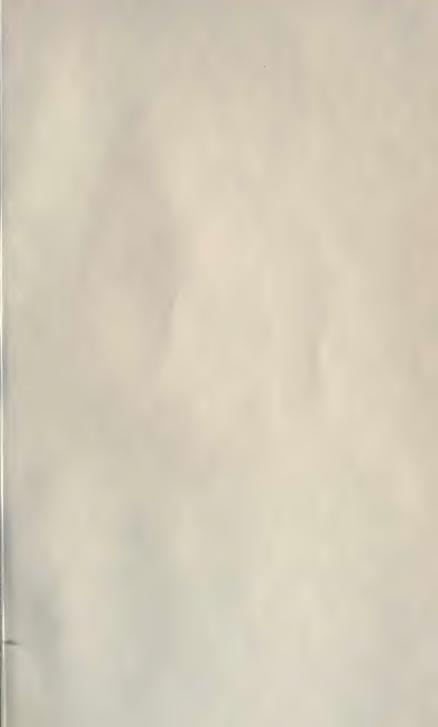
To those gentlemen who have fully recognized our usefulness, and also, the necessity of supporting a medical periodical in the Dominion of Canada, and who have regularly paid their subscription, we beg to tender our sincere thanks.

#### THE CHEMISTS' ASSOCIATION, MONTREAL.

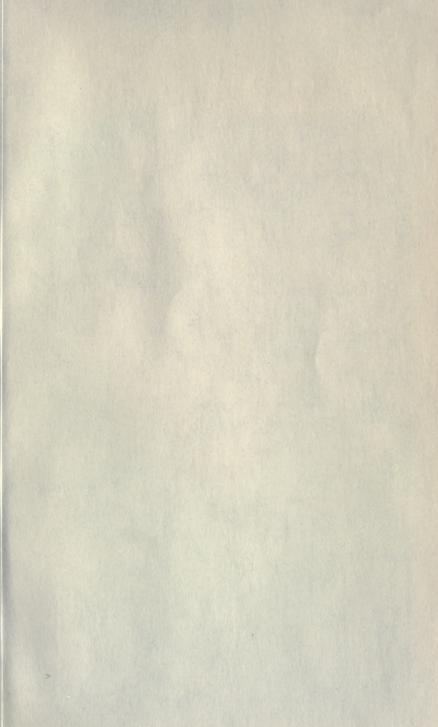
The regular monthly meeting of the above association was held on the 4th of June. A very interesting and instructive paper upon Strychnine was read by Dr. Girdwood, who, we may add, has paid very great attention to this the subject. It is intended, we believe, to have the Association represented by delegates at the annual meeting of the American Pharmaceutical Association, which takes place this fall at Philadelphia. The Chemists' Association has had a very successful season, all the members taking an active interest in its support. It is now, we believe, thoroughly established, and we hope its next session will be even more successful than the one just closed.

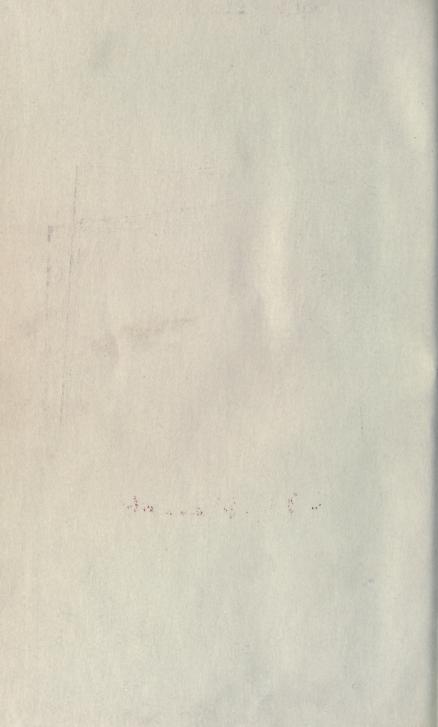
#### THE AMERICAN MEDICAL ASSOCIATION.

This Scientific Association held its annual meeting in Washington on the 6th of May, and continued in session three days. A good deal of interesting matter was laid before the meeting and ordered to be printed in its transactions. A resolution to establish institutions in the United States for the training of nurses, similar to those in operation in London was referred to a special committee. The committee on Medical Ethics offered a resolution endorsing consultation with females who had received a regular medical education. A good deal of discussion took place upon this resolution, and the matter was indefinitely postponed. The Association decided to hold its next meeting in May, 1869, at New Orleans.









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